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FEBRUARY 1955

FIREMEN

FIFTY-NINTH YEAR · NATIONAL FIRE PROTECTION ASSOCIATION

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(based on past experience and good judgement)

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Bi-Lateral! First to recognize the need for and construct fire hose with the Bi-Lateral feature.

First to change pin lug to rocker lug couplings.

First to offer FREE fire hose record cards to fire depts. They are still available.

6½ miles of FIRE HOSE!

Yes! A man must be *sure* of the value to his city before he places an order for 35,000 feet of fire hose. And with *Bi-lateral*, you *know* you can *always* be sure! Bi-lateral is the hose that is manufactured *without* a *single compromise*. As hose manufacturers we know we are dealing with *lives*, not dollars — and Bi-lateral Hose is built on the premise that "Safety is Worthless Unless it is *Absolute*."

Bi-Lateral FIRE HOSE CO.

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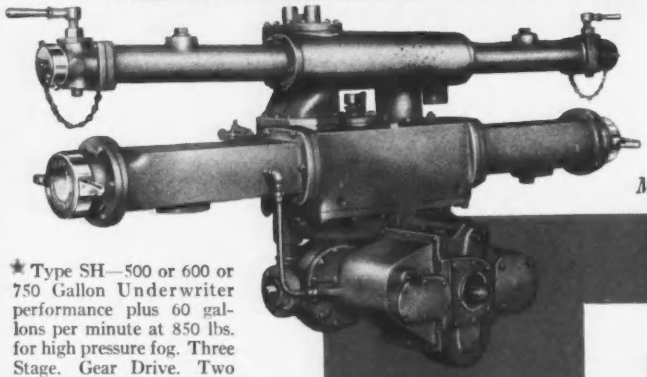
Manufactured by W. S. DARLEY & CO.



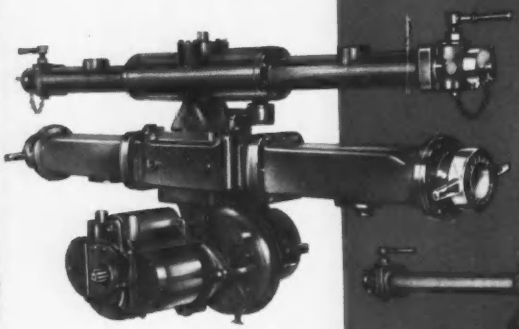
★Type SH—500 or 600 or 750 Gallon Underwriter performance plus 60 gallons per minute at 850 lbs. for high pressure fog. Three Stage. Gear Drive. Two suction inlets, 4", 4½" or 5". Two 2½" discharge valves (3 on 750 Pump).

Midship Mounts

★Type S—Capacities 500-600-750 gallons per minute at 120 lbs. pressure. Two Stage. Gear Drive. Two suction inlets, 4", 4½" or 5". Two 2½" discharge valves. (3 on 750 Pumps).

DARLEY CHAMPIONS ARE UNEXCELLED FOR PERFORMANCE STAMINA ENGINEERING

★*Approved by National Board of Fire Underwriters and All State Insurance Bureaus*

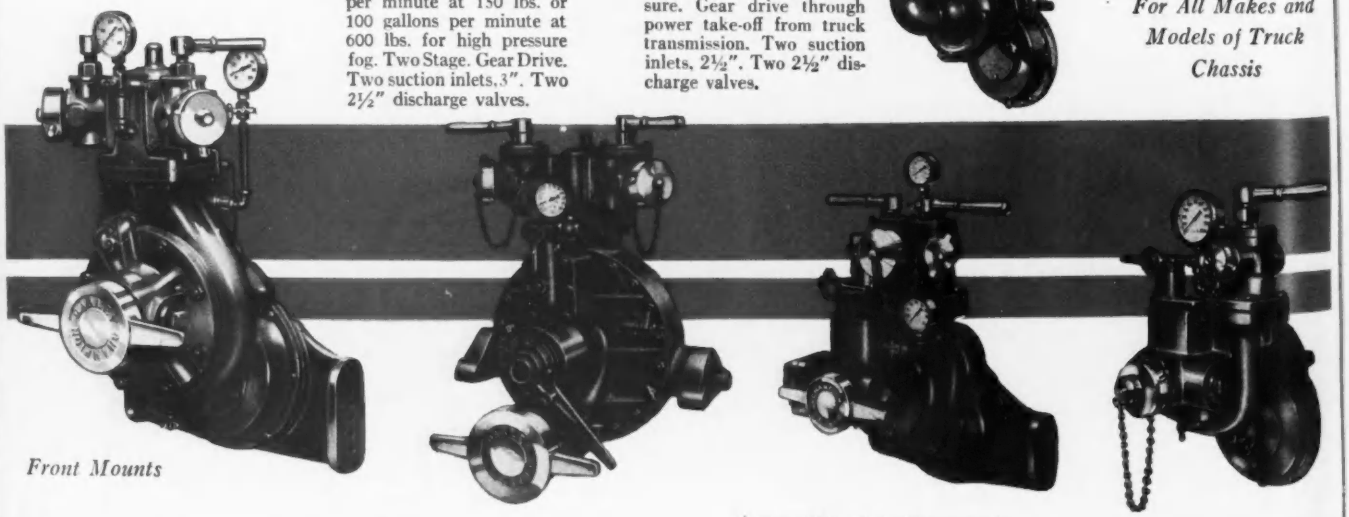


★Type M — Capacities 400-500 gallons at 120 lbs. Gear Drive. Two suction inlets, 3½" or 4". Two 2½" discharge valves.

★Type JMS—300 gallons per minute at 150 lbs. or 100 gallons per minute at 600 lbs. for high pressure fog. Two Stage. Gear Drive. Two suction inlets, 3". Two 2½" discharge valves.

Type HM—250 gallons per minute at 120 lbs. pressure. Gear drive through power take-off from truck transmission. Two suction inlets, 2½". Two 2½" discharge valves.

For All Makes and Models of Truck Chassis



Front Mounts

★Type KFF—Capacities 400-500-600 gallons at 120 lbs. Gear Drive. 3½", 4", 4½" suction. Two 2½" discharge valves.

★Type F — Capacities 400-500 gallons at 120 lbs. Direct Drive. 3½, 4" suction. Two 2½" discharge valves.

★Type JFS—300 gallons per minute at 150 lbs. Pressures up to 1000 lbs. Two Stage. Gear Drive. 3" suction. One 2½" and two 1½" discharge valves.

Type H—100 gallons per minute at 500 lbs. pressure. Gear Drive. 2½" suction inlet. 1½" discharge valve.

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Chicago 12

Clearing the way in winter traffic with a siren only, is like trying to buck through an unplowed road.

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also offers all types of *VEHICLE SIRENS* *INDUSTRIAL SIRENS* *Fire Alarm and Air Raid Sirens*

When snow muffles sound, when car windows are tightly shut, only the Beacon Ray can penetrate, can get attention! Don't struggle through any more bad weather without its protection. Don't postpone its purchase — you need it — NOW!

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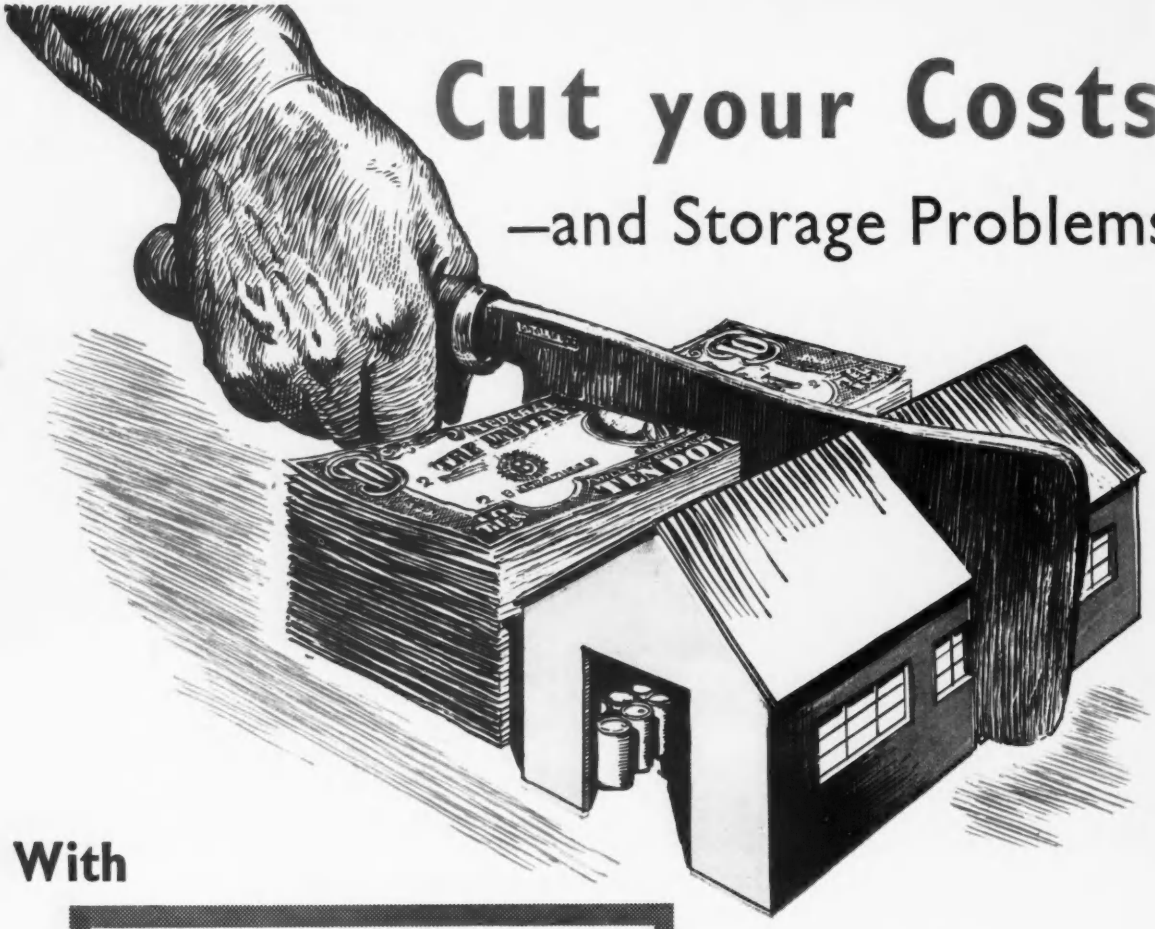

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THREE GALLONS of Nicerol and 100 gallons of water will produce over 1,000 gallons of Nicerol foam through a mechanical air pump. Changing and replacing strainers is reduced to a minimum, as Nicerol does not form sludge even after long storage. Its pH of 6·8 to 7·3 indicates neutrality, thus ensuring freedom from corrosion in valuable equipment, and in storage drums. A less obvious factor in Nicerol economy is its speed of effective action. Nicerol saved several hundred million dollars in World War II, and is still supplied under contract to several Navies and Air Forces throughout the World.

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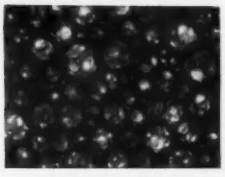

Here's why Nicerol Air Foam gives greater heat resistance

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***Nicerol*— THE LONGER LASTING AIR FOAM**

Keeps longer in storage — Puts out more fire faster — Outlasts the fire

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Don't get caught *"flat footed"* without an ample supply of the clear water back-pack extinguishers which are "the choice for quality the world over."

For many years **INDIAN FIRE PUMPS** have been unsurpassed in design, performance and construction. There is nothing else "just as good." Our company was established in 1888.

To fight fires faster, easier, more efficiently get the equipment that is without equal — get **INDIAN FIRE PUMPS**! Approved by Underwriters' Laboratories. "They are worth their weight in gold."

"Choice for Quality the World Over."

The INDIAN is available in the lever type, known as our No. 80 INDIAN.

"We have used **SMITH INDIAN FIRE PUMPS** for several years and now need two more which please ship at once. We cannot afford to be without **INDIANS** and consider them to be the handiest piece of fire fighting equipment on our truck."

F. H. SANDERS, Mayor
Aliceville, Alabama

Fire Truck unit built by Howe Fire Apparatus Co. of Anderson, Ind. and recently delivered to Library Fire Dept.; Library, Pa. Note **INDIAN FIRE PUMPS** mounted in place. More new trucks are coming through with **INDIANS** as specified equipment.

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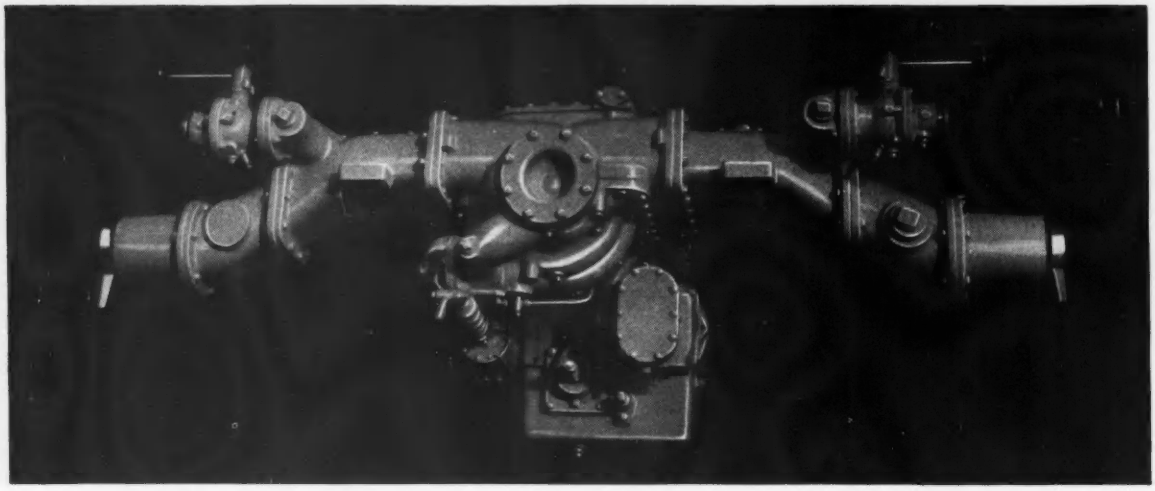

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	B Ratings	A Ratings
• QL and QLHD	500 GPM at 120 lbs.	500 GPM at 150 lbs.
• QL and QLHD	600 GPM at 120 lbs.	600 GPM at 150 lbs.
• QL75 and QL75HD	750 GPM at 120 lbs.	750 GPM at 150 lbs.

PLUS FEATURES:

LOW OVER-ALL HEIGHT—The low over-all height of the pump above the frame provides substantially more room for tank, compartments, or hose space.

VOLUME-PRESSURE PUSH-BUTTON CONTROL—Push-Button on panel enables operator to change over from pressure to volume or vice versa, carrying instrument panel operation one step further for simplicity of control.

PANEL MOUNTED RELIEF VALVE CONTROL—A convenient wheel on panel makes it easy to set relief valve quickly and accurately. (Relief Valve is built into pump—another new feature.)

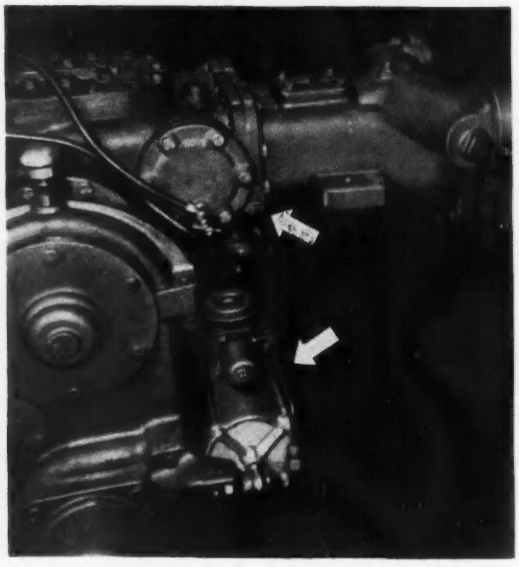
DEEP DROP TO FIT MODERN CHASSIS—The QL and QL75 Series is designed with a Deep Drop between mounting pads and center line of drive shaft to fit up-to-date truck chassis—an important aid in engineering the pump into the chassis.

EASIER TO SERVICE—The new design makes it convenient to service pump from the bottom for inspection—or minor repairs. Lower half of pump, or whole pump can be dropped down between frame without marring enclosure panels or disturbing gauges or instruments.

PUSH-BUTTON PRIMING—This feature, so popular on previous models, has also been incorporated in the QL and QL75 series.

BUILT-IN SPEED COUNTER—Provides convenient way to measure propeller shaft speeds.

Below—Close-up view of built-in Relief Valve at top center and Pressure-Volume Control Cylinder at bottom center.



Write for Bulletin No. 334 on The NEW HALE QL and QL75 Series of Centrifugal Pumps. HALE Pumps are Built in all Standard Capacities.

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CONSHOHOCKEN, PA.

Firemen

Volume 22 — Number 2

WARREN Y. KIMBALL — EDITOR
PAUL R. LYONS — ASSOCIATE EDITOR
HENRY S. GERE — ADVERTISING MANAGER

Published monthly for the fire service members of the
NATIONAL FIRE PROTECTION ASSOCIATION

A VOLUNTARY NON-PROFIT ORGANIZATION
60 BATTERYMARCH ST., BOSTON 10, MASS.

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Cover Photo

Fire in the Newell Building, a 4-story mercantile structure, presented a difficult attack problem in Rochester, New York, on New Year's Eve. This building, and others in the block, have their rear portions extending over the Genessee River, thus preventing an effective placement of apparatus for attack in those areas. Fire started in the basement of the Newell Building where paper and other combustible stock were stored. Vertical openings permitted spread up to the fourth floor in the rear. A passerby pulled the first alarm at 6:25 P.M. The second alarm was transmitted seven minutes later.

Eventually 10 engine companies, 4 ladder companies, some rescue squads and 10 other units responded to participate in the attack. During this operation fire companies in outlying areas covered the city stations as part of the county mutual aid plan. Loss in the 4-story, wood frame, asphalt-roofed structure amounted to an estimated $200,000. (*Photo by Joseph Jensen.*)

Inspections Effective!

According to the January 11th *Weekly Bulletin* of the Los Angeles, California, Fire Department, during 1954 the population of that city increased by 66,950. In addition, 61,000 new buildings were erected in the city during the same period. Despite this growth, the total number of fire alarms responded to by the Los Angeles Fire Department dropped from 30,952 in 1953 to 26,862 in 1954, a reduction of 4,090. Response to actual fires was cut from 21,647 in 1953 to 17,257 in 1954, a decrease of 4,390. False alarms were reduced by 168.

There were 246,351 inspections made by the Fire Prevention Bureau and by fire companies in the house-to-house inspection campaign. During 1954 only 28 deaths from fire occurred in Los Angeles.

John H. Alderson, Chief of the Department, commends the fire fighters in the *Weekly Bulletin* editorial, in which he states: "However, in my opinion, the major factor (in the reduction of fires and fire deaths) is the fact that members assigned to regular station duty have grasped the importance of the house-to-house inspection program, have approached that problem with a good will and have made it work. To my knowledge, nowhere has any department reduced in one year the actual fires to which they responded by 26 percent. It is a record of which all members can be, and should be, proud."

The editors of FIREMEN magazine will be pleased to hear of the achievements of any fire department, large or small, which can excel, in the same manner as has Los Angeles, in reducing fire deaths and fire incidence through fire prevention education and house-to-house inspections.

According to estimates of the NFPA Fire Record Department, fires caused 12,550 deaths and $1,099,500,000 loss in the United States and Canada during 1954. Fatalities included 12,100 in the United States and 450 in Canada. Corresponding figures for 1953 were 11,890 and 477.

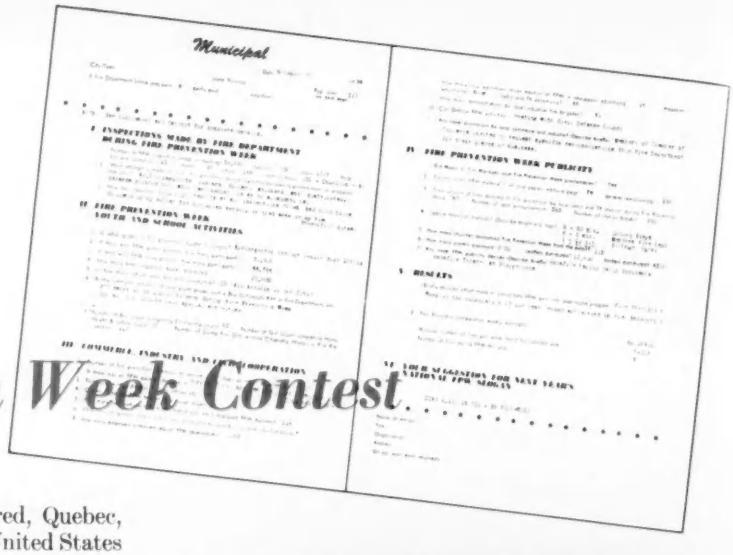
For the past few years the trend in total fire deaths has been upward. The experience of the Los Angeles Fire Department provides strong testimony that persistent inspection by fire fighters can reduce the toll of tragedies and property loss.

FP Week Contest Winners

Some of the winners of the 1954 Fire Prevention Week Contest are announced on page 10 of this issue. Space does not permit a more complete listing of the award-winning entries of the cities and towns who participated in the international contest sponsored by NFPA. However, a complete list of the top winners and recipients of certificates of merit and honorable mention awards has been published. Copies of this list may be obtained by writing to the NFPA Public Relations Department, 60 Batterymarch Street, Boston 10, Massachusetts.

NFPA 60th ANNUAL MEETING
NETHERLANDS PLAZA HOTEL
Cincinnati, Ohio
MAY 16-20, 1955

Point-Scorers in the *Fire Prevention Week Contest*

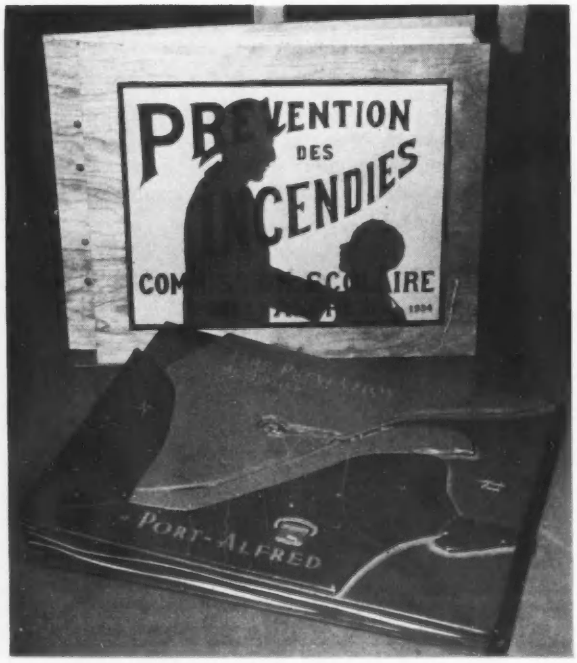


LOUISVILLE, Kentucky, and Port Alfred, Quebec, were the Grand Award winners in the United States and Canada, respectively, in the 1954 NFPA Fire Prevention Week Contest. The contest, sponsored annually by the National Fire Protection Association, is open to all municipalities and industrial firms and government installations.

In addition to these municipal winners, Grand Awards went to: Argonne National Laboratory, Lemont, Illinois (Industry); Anniston Ordnance Depot, Anniston, Alabama (U. S. Army); Naval Station Seattle, Washington (U. S. Navy); Carswell Air Force Base, Texas (U. S. Air Force); Camp Petawawa, Ontario (Department of National Defence, Canada).

A total of 1668 entries were received; 1130 in the Municipal Division; 454 in the Government Division; and 84 in the Industrial Division. Included in the overall total were entries from Alaska, Puerto Rico and overseas military installations.

Grand Award Winner among U. S. Municipalities — The fire department of Louisville, Kentucky, headed by Colonel John H. Krusenklaus, submitted this comprehensive 6-volume report of FP Week activities.



Grand Award Winner among Canadian Municipalities — Port Alfred, Quebec, submitted this 2-volume report which detailed the achievements in that municipality and won top award for Chief Eugene Labrie and his men.

Intense competition for top award is apparent to anyone who sees the thousands of entries submitted. Consequently, a popular question throughout the fire service is "What does it take to win the Contest?"

This article is intended to show some of the major elements which lead to the highest point totals for a winning entry. It happens that the entries analyzed on these pages did not achieve Grand Awards. However, they were considered outstanding in the various entry report sections which carry weight in the final judging.

EARLY in the Summer of each year an official entry blank is sent to all NFPA member fire departments (see August, 1954, FIREMEN) and to thousands of other departments whose municipalities are eligible to participate in the contest. The entry blank has five sections containing questions on Fire Prevention Week activities. In general, judging of any entry is based on the achievements reported in these sections.

As in any contest which requires the submission of written material, neatness is an important factor. It is helpful if pictures and newspaper clippings are pasted neatly into the book or folder which contains the entire entry.

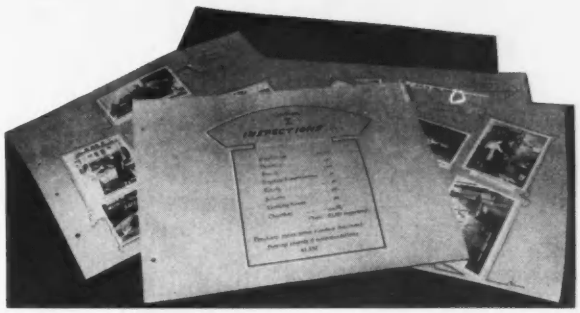
In many cases "attractiveness" is overdone. Some entries have required many man-hours of labor and perhaps thousands of dollars of expense in creating a highly professional presentation. However, the size, weight and volume of material alone have no bearing in the final judging. Features which carry weight in favor of an entry include: *careful organization* of information in the order called for by the entry blank; *believable statements* and proof of their validity in the form of letters, documents, photos, newspaper clippings; *clarity and brevity* of presentation — make the facts stand out and tell your story simply and forcibly — the judges can only devote limited attention to each of the many hundreds of entries; *originality* — impress the judges with fresh approaches to fire prevention promotion — year-after-year sameness is less effective in "selling" the citizens in your community.

The purpose of the contest is to encourage the use of Fire Prevention Week as a "springboard" for year-round fire prevention programs. Therefore, what counts in any entry is not only the sincerity and completeness of reported activities, but also the significance that these activities will continue to affect the community after Fire Prevention Week has passed.

In past years some Grand Award winners have achieved their objective with a small volume which reported outstanding inspection programs, educational programs for the youth, industrial and civic organizations and highly effective publicity which has lasting appeal to the community.

Fire Department Inspections

One of the most effective inspection programs was reported in the entry of Providence, Rhode Island. During Fire Prevention Week members of that fire department inspected 59,882 dwellings, 150 factories, 1226 stores, 15 hospitals and institutions, 25 hotels, 168 schools, 122 rooming houses and 49 churches. In addition 41,250 fire prevention pamphlets were distributed. All inspections were reported on special forms used by the department and were followed up by fire companies, or, if necessary, by the Providence Fire Prevention Bureau. Naturally, during the program hazards were pointed out to the dwelling owner or plant manager concerned and rechecks made of more serious conditions to see that the hazards were eliminated.



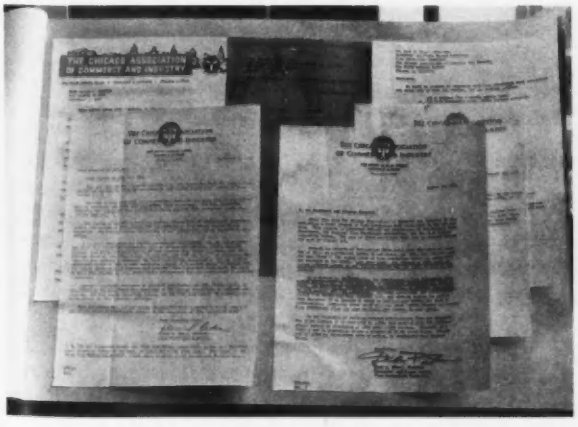
A simple but effective presentation of accomplishments through inspections was in this report of the Providence, Rhode Island (Second place winner — Class III, 8th in U. S.) Fire Department headed by Chief Lewis A. Marshall.

For contest entrants reporting such inspections is not merely a matter of filling in some numbers on the entry blank. Sufficient information must also be included in the report to verify the achievements of the inspection program. In the case of the Providence entry, proof of the program was given by a number of newspaper clippings and radio and television news items which verified the activities of the fire fighters.

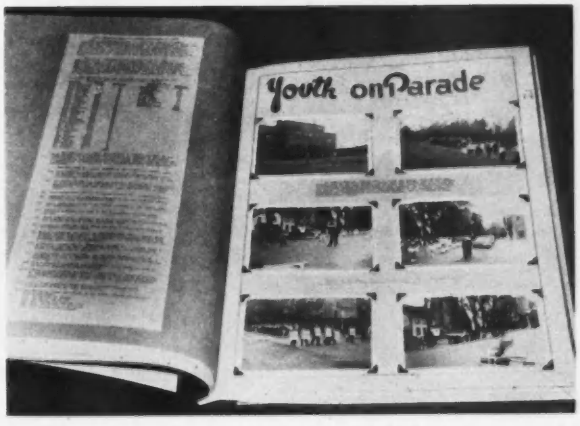
Youth and School Activities

The second section of the entry blank asks questions relating to one of the most important phases of fire prevention. In other words just what is accomplished in contacting and influencing children in grade schools, high schools and youth groups.

One of the highest point-scores in this section was achieved by Kentville, Nova Scotia, which placed second in the Grand Award competition for Canada. Kentville submitted its entry in four large volumes which included typewritten reports, photographs and news clippings. A large portion of one volume was devoted to the activities of the high schools in the town and to the schools in outlying districts. The Kentville School enrollment was 1,007 pupils, while rural schools around the town had 1,871 pupils. Here are some of the tasks



One page of the Chicago, Illinois (Second place — Class I, 5th in U. S.), entry shows the extensive correspondence used by the Chicago Association of Commerce and Industry to support its description of this aspect of fire prevention.



A page of the Kentville, Nova Scotia (Second place — Class D, Canadian entries and second best for Grand Award), entry shows how reports of activities for educating children were listed and thoroughly described with pictures, illustrations and other essential information.

which the men and Chief "Bev" R. Wade accomplished during Fire Prevention Week.

A special parade was held in which 1,000 school children participated. Fire prevention comic books, such as "Smokey Stover," were given to all children in the lower grades. All schools conducted fire drills at some time during the Week. Each school class in Kentville also elected a fire chief and that boy or girl retains the title for the duration of the school term. Contests were held for the school children; one was a coloring contest for the lower grades and another was an elementary school contest in which the children were required to draw diagrams of their homes and illustrate where fire could start if fire safe practices were not observed. The fire department and service groups in Kentville cooperated to donate prizes for the contest winners.

In as many cases as possible the fire department members made special efforts to have school pupils accompany them during dwelling inspections.

Commerce, Industry and Civic Organizations

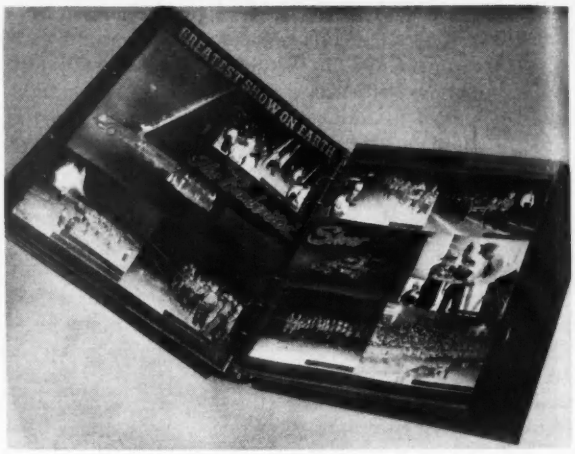
An impressive report on this subject was submitted by Chicago, Illinois. The entire contest entry consisted of one large volume and a small book which contained typewritten explanations of the information requested.

Outstanding work was accomplished by the Fire Prevention Committee of the Chicago Association of Commerce and Industries. Chairman of this Committee was NFPA member Elmer F. Reske.

During Fire Prevention Week the Association showed 169 movies to commercial and industrial establishments and civic organizations. Attendance at these showings totaled 69,000 which was double the attendance achieved during the 1953 campaign. In addition 49 speakers addressed service groups, civic groups and other organizations throughout the city. Attendance at these engagements totaled more than 30,000, which was a 300 percent increase above the 1953 total. News clippings and a large amount of correspondence helped to support the figures quoted in the Chicago report.

Typical of the achievements reported in the entry is the mention of 7500 employers in the Chicago area who scheduled regular Fire Prevention Week observance, while at least 25 demonstrations were presented by industrial fire brigades in the city.

Memphis, Tennessee (Second place — Class II, fourth in U. S.), submitted a multi-volume entry which included these three volumes describing only the methods and extent of publicity used in that city during Fire Prevention Week.



One of the best presentations was that submitted by Puerto Rico, describing the extensive methods used to carry fire prevention education to children and to the people in the outlying districts.

Publicity and Special Recognition

A fresh approach to the methods of publicizing Fire Prevention Week is attractive, not only to the judges of the entry, but also to newspaper editors, and radio and television stations. The effectiveness of novel publicity campaigns is usually attested to by the excellent treatment in newspaper stories and the releases used on radio and TV. One of the largest reports covering publicity was submitted by Memphis, Tennessee. Three well-filled volumes detailed the efforts of fire fighters in Memphis to create a lasting impression of fire prevention activities. Another exceptional entry which demonstrated effective publicity achievements was that submitted by the Insular Fire Service of Puerto Rico.

Each year the fire service of Puerto Rico, under Chief Raul Gandara, submits a comprehensive report of its activities during Fire Prevention Week. Again this year the entry received one of the Special Recognition Awards, since under the rules of the contest Puerto Rico cannot be judged as a municipality.

Chief Gandara's entry consisted of a large and small volume containing spectacular pictures, illustrations and news reports describing the intensive activities carried on in that area. Of particular interest was the section entitled "Greatest Show on Earth," a circus-type presentation of activities of the junior firemen and other children in Puerto Rico. Chief Gandara and his department members have trained "Bomberitos" who are children up to 12 years of age. This year 600 of the junior firemen participated in a special demonstration conducted on the track and field grounds of the University of Puerto Rico. The children wear special shirts and helmets and extinguish fires under supervision.

The official school publication, "Escuela," which is used as teaching material in all elementary and secondary schools, carried a number of Fire Prevention Week announcements and advertised the Poster and Essay Contests. There are more than 560,000 students in Puerto Rico schools, of which 120,000 actually entered to compete for $3000 in contest prizes.

In addition to the school activities, the fire department distributed one million leaflets to bakeries, laundries, department stores and other establishments.

(*Continued on page 24*)

Industrial Fire Protection

MANY times the characteristics which make an industrial plant outstanding in fire safety are found in the detailed planning and construction of its fire protection facilities. Careful planning and design may be a significant factor if fire strikes the plant, since the matter of a few seconds in fire fighting operations may make the difference between successful industrial fire brigade action and the need for all-out assistance from the local municipal fire department.

A good example of careful planning is illustrated in a report to NFPA by Deputy J. W. Gault, State Fire Marshal Department, Salem, Oregon, who calls attention to an interesting hose reel and hydrant house arrangement which he found at the plant of the Moore Dry Kiln Company.

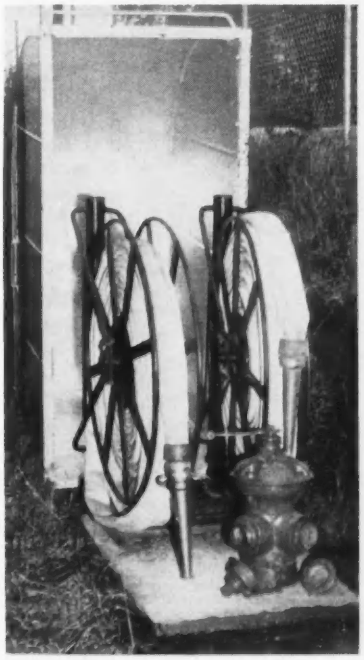
The main shop building of the plant includes the office, parts storage, precision instrument shop, main fabricating section, an isolated paint spraying section, plus a new shipping department building. All of these are protected by a dry pipe sprinkler system tied in with services of the American District Telegraph Company.

The yards of the plant area feature six standard hydrants located on 6- and 8-in. mains. Water to the yard system is supplied by two 1500 gpm automatically controlled electric pumps. A 50,000 gallon elevated tank is used as a reserve supply for the system.

Deputy Gault reports that his attention was particularly attracted by the design and installation of the fire hydrants and hose houses, which are illustrated in pictures on this page. The entire system was designed by Plant Superintendent Leonard Olson and constructed in the company shops.

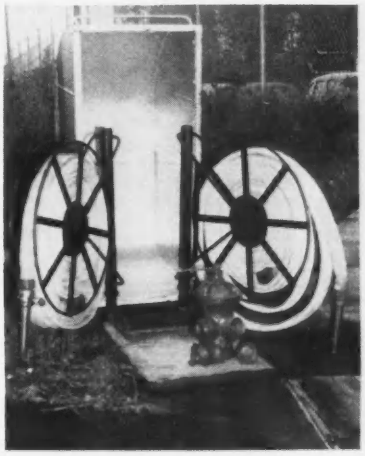
Each hydrant features an outside sheet aluminum cover painted white and encircled with a wide red band plainly marked "Fire Hydrant." The cover is hinged in the back allowing quick raising to swing it back from the hydrant and hose reels.

Here is a typical hydrant and hose house installation at the Moore Dry Kiln Company with the aluminum cover at the closed portion.



Hose house when cover is raised shows open hydrant outlets and hose lines readily available to plant fire brigade members.

Each house has two hose reels, each carrying 100 ft. of 2½-in. hose with attached nozzles. The reels are supported by iron frame work and attached to iron posts which in turn are welded to an iron base firmly secured in a concrete slab. Hydrant wrenches are usually in place on the valve stems and normally hydrant caps are removed and the 2½-in. lines connected to the outlets.



Hose reels may be rotated on swivel base permitting lines to be taken directly from the reel thus eliminating "side binds".

The installation shown on this page is an exception to the procedure, since it is located adjacent to the main gate and intended for use by the public fire department. In this case it is deemed advisable by the plant superintendent to leave the outlets open to permit quicker access to the hydrant if fire occurs when the plant is closed.

Plant Fire Protection

FIRE fighters and management personnel in industrial plants can obtain valuable information on fire protection from the "Industrial Fire Brigades Training Manual," published in 1954 by the NFPA. The 160-page illustrated volume may be obtained for only $3.25 per copy by writing to the NFPA Publications Department, 60 Batterymarch Street, Boston 10, Massachusetts.

The manual contains an introduction which describes methods for selecting, organizing and training a fire brigade for plant protection. The first chapter presents a thorough discussion of fire protection facilities including water supplies, first aid equipment and fire apparatus.

Other chapters discuss fire extinguishers and other equipment, effective use of hose streams, handling hose and ladders, salvage operations, rescue work and emergency equipment and care and inspection of plant fire protection equipment.

Sizing Up Your

Public Relations!

By Robert W. Schuette, NFPA Public Relations Manager

From an address given at the Connecticut Fire Officers' Training Conference, University of Connecticut, in Storrs, November 10, 1954

FIRE department public relations is a relatively new idea — too new to expect it to be universally accepted and applied. It has, however, been talked up quite a bit in recent years and to their credit a lot of fire departments have attempted to do something about it. A few are doing outstanding jobs. They're making public relations "pay off" in terms of better morale and efficiency in the department and in the understanding and support of the community.

But these successful efforts are the exception when we consider the far greater number of fire departments who are disappointed and disillusioned with the results of their public relations activities.

What's the answer, for this latter group particularly? What's the right approach — the result-getting approach to public relations?

Whom Can You Reach — What Do They Want?

STEP ONE is "know your public." Know with whom you must deal. What are their interests, their limitations, their attitudes and prejudices? This isn't as difficult as it may seem because, despite the number of individuals that make up the public in any community, they can be studied as more workable, reachable groups for your purposes.

Look to these groups and for certain influential individuals as the "prime movers" who tend to direct the interest, purposes and opinions in your community. They fall into five classifications:

1. The families of fire department personnel.
2. The press, radio and TV, its editors and reporters.
3. Thought leaders including clergy, teachers, other city officials, prominent retailers and professional men, union officials, civic workers and industrialists.
4. Organizations including town or city planning groups, welfare agencies, youth groups, veterans, fraternal and service groups, cultural and political action bodies.
5. Crusaders such as protest groups, petitioners, "voice-of-the-people," special events and the "rumor factories."

Add these publics up and in every case, they'll equal the total population of your town.

Now what would so many different interests consider a satisfactory contribution by the fire department to the community's total well-being? It will be more than just fire fighting and fire prevention.

Here are the ten basic interests that pretty much reflect the wants of the public in any town.

1. Commercial prosperity
2. Support of religion
3. Work for everyone
4. Adequate educational facilities
5. Law and order
6. Population growth
7. Proper housing and utilities
8. Varied recreational and cultural pursuits
9. Attention to public welfare
10. Progressive measures for safety and good health

You'll find that the fire department must somehow identify itself with each of these mutual interests to satisfy the whole town. And when it does perform in a manner that shows how it serves those interests, to the advantage of the community and the department — that's the kind of public relations that pays off!

Your department is already furthering those interests; your current activities for the most part already meet these requirements for public approval, *if only the public were aware of it!* You're already making important contributions to your town's prosperity, religion, schools, housing — every one of those ten mutual interests — and failing to get proper credit for it.

"Know Then Thyself"

This could be called "STEP TWO" in making public relations work for you — know yourself, your own fire department. How do you measure up in contributing to the total well-being of your town? Remember, the public sees the fire department as a single personality, a citizen. Not until you have a pretty good understanding of where the department succeeds and fails as a citizen, are you ready to take "STEP THREE"; going after the credit your fire department deserves.

STEP THREE is important — but it's worthless and meaningless unless STEPS ONE and TWO are taken first. And this is where the majority of the fire departments in our country are making their biggest mistakes "public relations-wise." They are omitting the first two steps.

I wish the word "publicity" had never been invented. This term has caused a lot of grief — not only among fire departments, but among every other group or organization that has been victimized by the belief that publicity and public relations are the same thing. They're not, of course. Publicity is just one minor tool of public relations, and it is important and effective only when used at the right time and place.

Nevertheless, we find most departments today counting on publicity to carry the whole public relations load. It isn't working and it never will.

Using the Tools of Persuasion

The rightful place and use of publicity is in STEP THREE — alongside of, and equal in status to, a number of other public relations tools. These are the actual instruments of persuasion that you can manipulate to show Mr. Average American in what ways your department is deserving of his approval.

Topping the list among these instruments is personal

contact. It's the one you use the most, yet are most likely to overlook because: 1) It's a combination of seemingly minor things; and 2) It's the one tool that requires the full understanding and cooperation of every member of the department.

To check whether your personal contacts are working for or against the department's best interests, get the answers to such questions as: Are the department's properties, its buildings, grounds and equipment, maintained as attractive as is practicable? Are the men neatly groomed and obviously proud of their uniforms? Is telephone courtesy carefully maintained? Does the department "clean its dirty linen" in private? Does it avoid throwing its weight around in domination of community decisions, even though it has the influence and power to do so? Are the men encouraged to participate on their own in the town's civic and cultural affairs, and is the department itself known to be willing to assist in civic affairs outside of its specific field?

Publicity, next on the list, breaks down into such subdivisions as press relations and printed matter. The ideal policy in using this tool is to have no secrets. Your local press, radio and TV should have access to all information which the citizenry feels necessary to its satisfaction, except, of course, information which could be damaging for personal or legal reasons.

Like a good reporter, the fire department should supply information to its own personnel first, and then to the community. The department should also find out what the local press considers news. And the best way to find out is to go directly to your editor, sit down with him and review the department's activities for the past six months. He can then point out that type of information he'd like to have you supply him in the future.

Incidentally, a lot of fire chiefs feel that all press contacts and news releases must be initiated or at least cleared through them. Except in the smallest departments, this isn't a desirable practice. It is good policy, of course, for the fire chief in name to be the one official spokesman for the department, but the chief rarely has the time to learn and execute the necessary details of a continuing publicity program.

This duty should and can be delegated safely to another officer or man who, except for top policy pronouncements, can turn out the standard news developed in the course of the department's routine activities. Editors like this arrangement, too, as long as it's understood that the man assigned to the job is the department's official press representative.

The fact is that press relations is an important source of information for the department as well as an outlet. The right man can bring back a wealth of ideas from his contacts with editors and reporters. And often, the first rumbles of community dissatisfaction over some department policy or action are to be heard in newspaper offices. This is another good reason for assigning someone who can devote more time and attention to the job than could the head of the department.

Now I mentioned that publicity includes printed matter and I think your best policy in this respect is to shy away from producing your own posters, flyers and leaflets . . . unless you're able to turn out something fully competitive with those smooth, professional jobs that you'll find in every bank or store. These materials are intended to do a complete selling job on their own merits and should be carefully designed to represent their sponsoring organization in the best light.

Of the other tools useful in carrying out STEP THREE, you might possibly consider one somewhat of a new idea — that of regularly sending out the departmental bulletins or house organ to the press and the community's thought leaders.

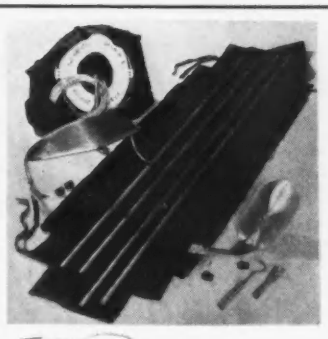
Old stuff to you, I'm sure, are such remaining promotional techniques as a speaker's bureau, open house and parades. But there's no reason why you can't tie them in with your over-all public relations objectives and still promote any special campaigns adequately.

The Signs of Success

There is one more step to successful public relations operations. It's the evaluation of your efforts. Are they paying off and if not, why?

You can't mistake the signs that a good public relations program is paying off: it shows up in such different ways as a rise in efficiency and pride in the department; in new equipment that an understanding, sympathetic public demands, where once they fought to cut the department's budget down to nubbins; and an increasing interest among the best young men in town to join the department.

There, in essence, you have the four steps that constitute the approach to good public relations — the approach only, though. The doing is up to you, and let me assure you: every department, whatever its size, large or small, already has all the necessary ingredients to do it right.



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Seven Die in Marylander Rest Home Fire . . .

Based on a report submitted to NFPA by Montgomery County Fire Marshal Charles H. Howe, Jr., (NFPA member).

Front of Marylander Rest Home after fire. Sunporch is at extreme left.

DESPITE careful pre-planning and good fire fighting, seven elderly persons died from fire which occurred in the Marylander Rest Home, Germantown, Md., at 3:38 A.M. on December 6, 1954. Fifteen others were evacuated successfully by the rest home personnel, police officers, and fire fighters. The operator of the home had contracted for an approved system of automatic sprinkler protection, and installation was scheduled to begin that morning.

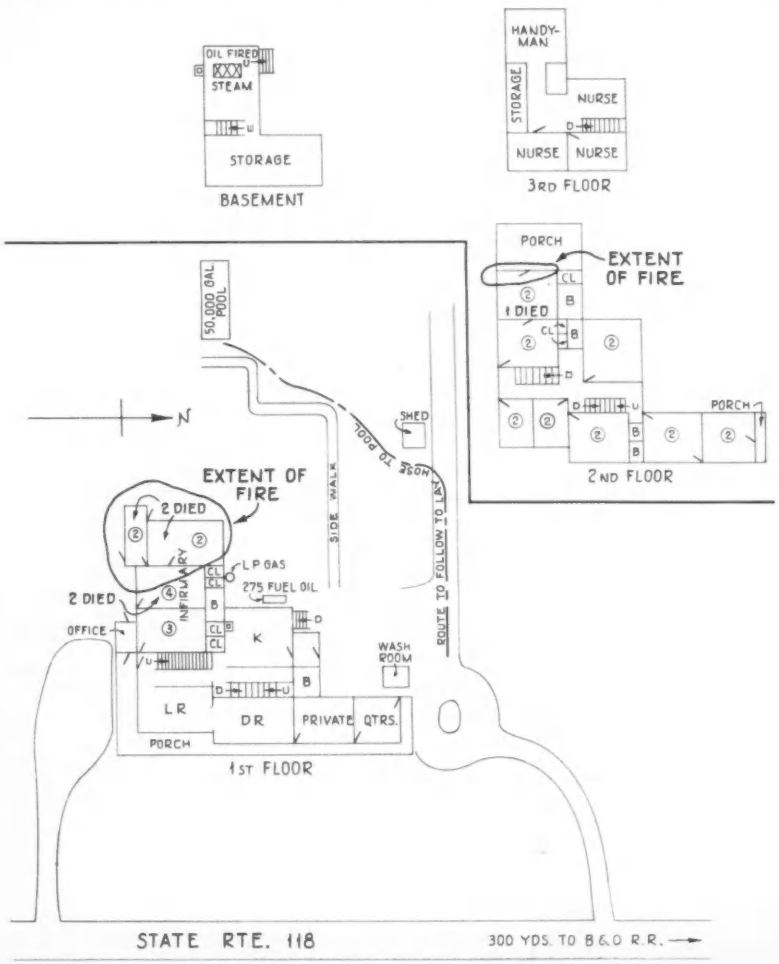
Investigation by the Montgomery County Fire Marshal, the State Fire Marshal, representatives of the NBFU and the Maryland Fire Underwriters Rating Bureau determined that the fire had started in the sunporch. Apparently a patient had thrown bed clothing over a gas-fired space heater, or else a bed inadvertently had been moved too close to the space heater. This type of auxiliary heating device is prohibited by Maryland State Law, but had been installed without the knowledge of local authorities. At the time of the fire one night nurse was on duty (in accordance with the state law for a rest home of this size). Before the fire occurred she had attended the patients at approximately 2:30 A.M. At about 3:30 A.M. she descended from the second floor to discover the fire in the porch area. Despite the heavy smoke she had no warning of the fire while she was on the second floor.

She immediately notified the owner of the rest home who called the fire department and began evacuating patients in a small cottage at the rear of the home. Meanwhile the night nurse, the day nurse and two maids were evacuating the patients in the main building, although the heavy smoke prevented such attempts in the fire area.

The telephone alarm was received at the Washington Grove Fire Control Board at 3:38 A.M. However, before complete information was obtained by the dispatcher the telephone lines at the home were burned and the dispatcher had to confirm the call's location through a telephone operator.

Pre-planning for fire in this home had developed an automatic 1st alarm response which included volunteer fire companies of Rockville (11 miles distant), Gaithersburg (6 miles), Hyattstown (10 miles), and Upper Montgomery County (9

(*Continued on page 19*)



(Left) Sketch of rest home and grounds. Fire occurred in circled areas on 1st and 2nd floors. Circled numerals indicate number of patients housed in each room. Bedridden patients were on 1st floor; ambulatory patients on 2nd floor. Each floor had a local fire alarm system and soda acid extinguishers, while a foam extinguisher was in the basement.

. . . and Six Die in New Orleans Nursing Home

Based upon a report by NFPA member Sidney C. Ford, Director, Fire Prevention Division, New Orleans, Louisiana, Fire Department.

SIMILAR to the Maryland fire reported on the opposite page was the tragedy which occurred in the LeLe Nursing Home, New Orleans, Louisiana, at 10:01 P.M. on December 19, 1954. In this instance 5 bedridden patients perished in the fire, another died in the hospital and two patients were seriously injured. A sprinkler system was being installed in the home and was about 60 percent completed, chiefly in the residential part of the building. Only one pipe line extended to the porch area where the fire started, but the sprinkler system had not been connected to the water supply.

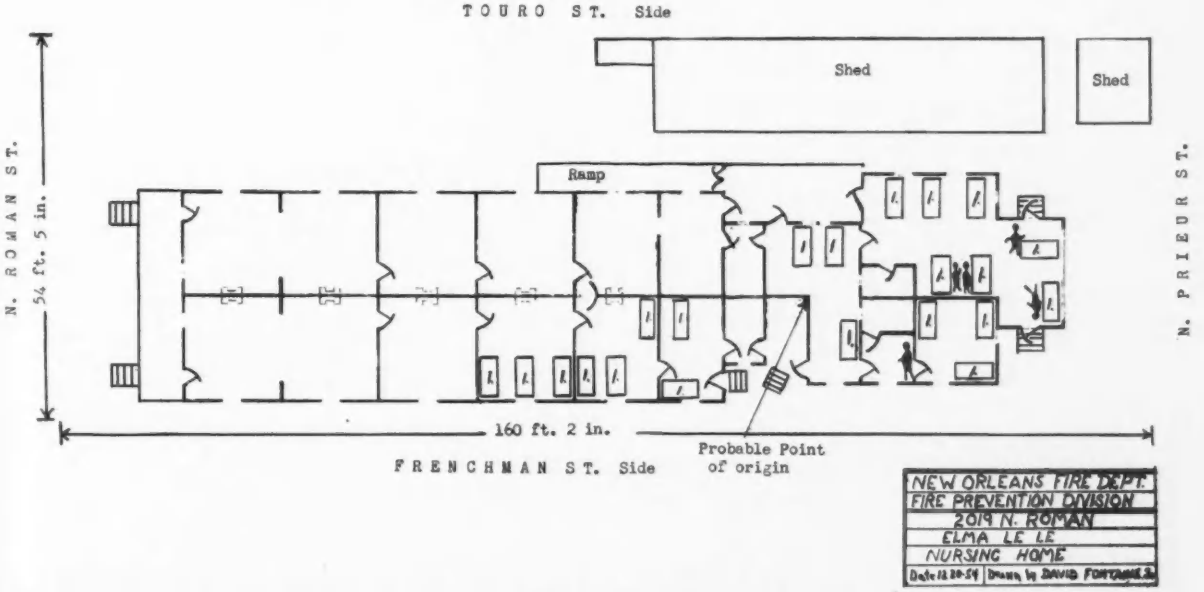
New Orleans fire fighters mopping up interior of nursing home after fire had claimed the lives of six elderly patients. (*Wide World Photo*)

The long, 1-story wood frame building with asphalt tile and tar paper roofing had 21 elderly patients housed in the rooms marked on the sketch below. It is believed that the fire started when a piece of clothing was ignited at the base of a 20-gallon gas-fired hot water heater on the open rear service porch. The heater was only 2 inches away from a ½-in. x 6-in. featherhead cypress weather-board wall and 5 inches away from the same type of wall on the other side. This exterior wall covering was deteriorated from exposure to the weather and was presumed to have ignited from the burning cloth. The fire traveled between the studs to the attic then spread through undivided attic spaces of the dormitory where the patients were housed. Discovery was made by a 14-year-old nephew of the home operator.

The only attendant on duty was at a party in the front of the building, which was used as a residence by the operator. A telephone alarm brought 10 pumpers, 3 ladder trucks, a rescue truck and 3 ambulances from the New Orleans Fire Department, headed by Superintendent of Fire Howard L. Dey, Assistant Superintendent of Fire Edward J. O'Brien, the Director of Fire Prevention, the State Fire Marshal and his Deputy, a police "crash" truck and 2 police squad cars also responded.

Chief O'Brien was one of 11 fire fighters who later received citations for their rescue work in this fire. While hose streams were covering him he went into the involved area

(*Continued on page 22*)



Sketch of LeLe Nursing Home. Black figures indicate where patients died. Rectangles with figure "1" are where beds of patients were located. Fire started on open porch near gas heater. Fire fighters used "self-contained" masks and other breathing apparatus in making rescues. Interior wall coverings were ⅜ in. "sheetrock" and wallpaper. Ceilings also were of ⅜ in. sheetrock.

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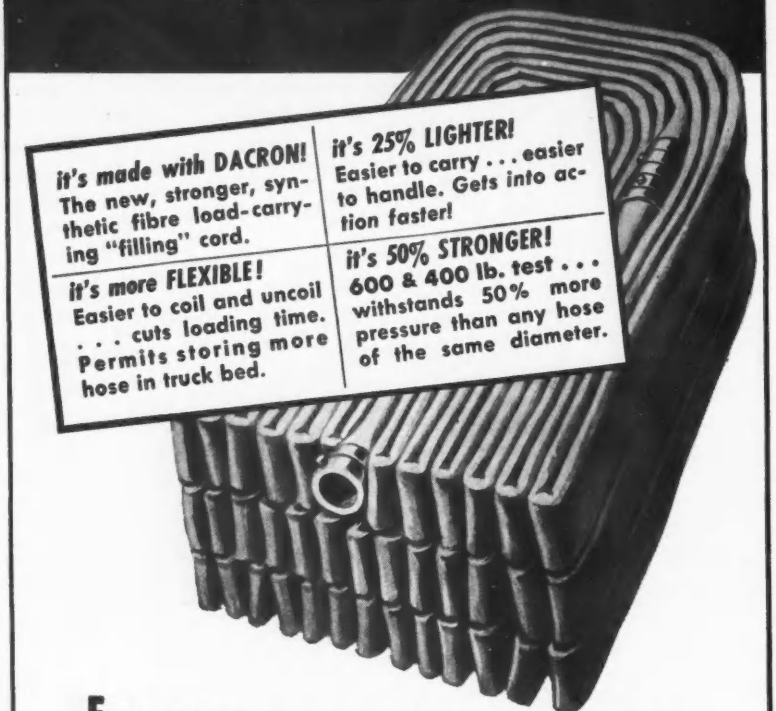

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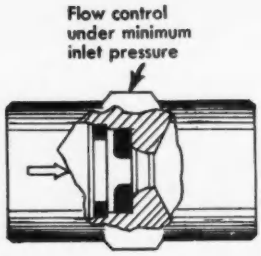

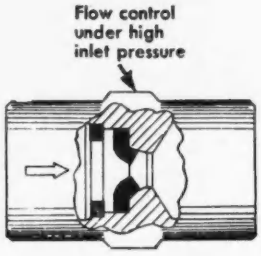

Flow Control Valves

SEVERAL control valves of interesting design have been developed by the Dole Valve Company, 1933 Carroll Avenue, Chicago 12, Illinois. The valves provide a required water flow in small pipe lines, regardless of pressure, thus preventing water waste and conserving water supplies needed for fire protection and other purposes.

The illustrations above, taken from Domestic Engineering, a publication of the company, show how the valves operate. There is a flexible hycar base rubber orifice, of which the size, thickness, seat and other factors are designed to certain measurements to provide the specified flow rates.

Under minimum inlet pressure the washer is in the position shown in the top drawing. As pressure increases, the flexible washer varies its size uniformly and inversely in proportion to the pressure. Thus, at higher pressures the orifice will decrease in size; as pressures become less the orifice increases so that flow remains constant.

New Slant on Old Topic

A PUBLICATION of the American Cyanimid Company, New York, New York, presents a new description of the famous "fire triangle." The December issue of the company's Safety News likens fire to a committee of three members (oxygen, fuel and heat), all of whom must be present to form a quorum and transact their destructive business.

Marylander Rest Home

(*Continued from page 16*)

miles). When the control board dispatcher notified these fire companies 10 pumpers, 4 ambulances and one rescue squad responded to the fire scene. Later additional ambulances were dispatched from Kensington and Damascus Fire Departments and from the Bethesda-Chevy Chase Rescue Squads.

First fire companies arriving found the enclosed sunporch involved. Booster lines, 1-in. and 1½-in. lines with fog nozzles made the initial attack. The pre-planned routine called for a 2½-in. line to be laid to a swimming pool on the property for backing up the light lines. Fortunately such support was not required since the pool was empty on the night of the fire. The volunteers completed extinguishment with less than 500 gallons of water.

Montgomery County police squad cars had received the radio alarm from the control center, arrived at the fire scene before the fire companies and the officers aided in rescue operations. Despite all rescue attempts, four of the elderly patients died in or near their beds. Three others later died of exposure and smoke inhalation. A police officer and a nurse were injured in the rescue actions.

Investigation disclosed that a local fire alarm system, installed to alert patients and personnel, was not operated, and fire extinguishers on each floor were not used by employees to control the fire.

The Maryland State Department of Health, after receiving the official report of the fire, recommended that no patients be allowed in the building until the automatic sprinkler system had been installed and all other local and state regulations pertaining to fire safety had been complied with.

Why not get a

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EVERY MAN IN YOUR FIRE DEPARTMENT?

(Left) Two patients died on this sunporch which was enclosed. Two others died in room behind door and window. Note deep charring of wood framing and trim. Volunteer fire fighters put out fire with less than 500 gallons of water.

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Here is a new concept in fire fighting . . . the Challenger . . . apparatus that gets there fast and delivers a knockout punch. It carries its own water supply and can get into action pronto. The Sharpsville Challenger is the only quality fire apparatus built to your own needs. It has years of experience behind it in engineering, construction and knowledge of what a fire department needs.

You should see this Oklahoma job . . . it is a Challenger Deluxe, and a dandy. Any chief would be proud to have it. Write for new bulletin CL, describing the Sharpsville Challenger Deluxe.

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- Washes and Drains in One Operation
- Cleans Thoroughly — With or Without Detergent
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- Low in Cost — Easy to Use
- Keeps All Hose Off the Floor — Wet or Dry — Clean or Soiled
- Loading Turn-Tables Useful also for Re-Loading Hose Truck and Dryer

The new, inexpensive A-Z Hose Washer drains and rinses the hose as it washes. 4 Roto-jets constantly spray hose with clean, fresh water — all sediment is flushed through collecting pan and down the drain. Can be used with or without soaps or compounds. Semi-automatic, the A-Z is operated by just one man. The brisk action of the cleaning brushes moves the hose slowly through the washer. No strain. No fatigue. Turn tables keep the hose OFF the floor. They're excellent for reloading truck (several lengths may be stacked on each) or loading the hose dryer.

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The patented electrically operated Circul-Air hose dryer circulates prewarmed fresh air through loosely coiled hose at the rate of 5 to 6 air changes per minute. Saves floor space, hard work and lengthens hose life!

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27th FDIC

NEARLY 2,000 members of the fire service and other interested organizations are expected to attend the 27th Annual Fire Department Instructors Conference at Memphis, Tennessee, February 22-25. The Conference is an annual event sponsored by the Fire Prevention Department of the Western Actuarial Bureau, Chicago, Illinois and the Memphis, Tennessee, Fire Department.

Richard E. Vernor, Manager of the WAB Fire Prevention Department and Memphis Fire Chief John C. Klink serve as co-chairmen. The meeting is attended by many fire department executives, educators from colleges and universities, fire and plant protection engineers, special officials and representatives of the armed services.

Members of the NFPA Staff who will appear on the program this year include Horatio Bond, Chief Engineer; Miles E. Woodworth, Flammable Liquids Engineer; and Warren Y. Kimball, Manager, NFPA Fire Services Department and Editor of FIREMEN magazine.

N. Y. State Appointment

MICHAEL H. PRENDERGAST has succeeded Thomas W. Ryan as head of the State Division of Safety, Albany, N. Y. He will direct the coordinating of the State Fire Training and Fire Mutual Aid Programs, State Civil Defense Rescue School, Police Training and Mobilization and the Safety Program for 80,000 State workers.

Mr. Prendergast is a member of the Haverstraw Fire Department where he serves as captain of Rescue Hook and Ladder Company No. 1.

"Monahan! We're waiting!"
McNaught Syndicate, Inc. © Collier's

Reduce The Fight In Fire Fighting With This Light Dacron Hose

Answering fire alarms is hard work and every man's strength must be saved to help combat danger on the job. Strength-sapping lugging of heavy fire hose is done away with when Dacron hose is used.

In spite of its light weight and easy flexibility which makes it so easy to handle, this hose is actually stronger than conventional hose, and withstands 50% greater pressure. It also resists damage by heat, chemicals, water absorption, mildew and abrasion.

Non-porous rubber tube with jackets of highest grade cotton warp thread, combined with filler thread of super-strong, quick drying Dacron, give this hose its remarkable qualities.

Its unique construction makes it easier to coil and it takes up less truck-bed space.

Our Delaware-Victor brand is rated for 600 pounds and our Bond-Battleship brand for 400 pounds. Both are factory tested under severe hydrostatic pressures far more rugged than the most severe use they would get in action.

We also manufacture a complete line of water and chemical fire hose for every municipal and industrial requirement. *Write for free folder and name of nearest distributor.*

QUAKER RUBBER CORPORATION
Philadelphia 24, Pennsylvania

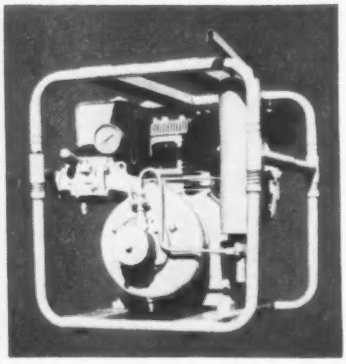
HKP
A DIVISION OF H. K. PORTER COMPANY, INC. OF PITTSBURGH

QUAKER PIONEER RUBBER MILLS
San Francisco 7, California

HAS YOUR FIRE TRUCK A HALE TYPE FZZ?

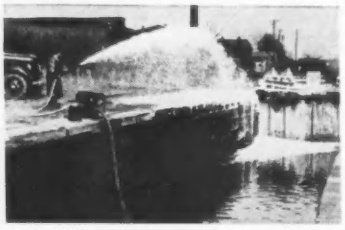
". . . All Fire Trucks should have one or more"

says Fire Chief from Missouri



Above — This frame-mounted FZZ (with carrying handles turned in) can be easily carried to source of water which truck cannot reach, for refilling booster tank or for fighting fire direct. Unit is also available mounted on two truck-type wheels or on rubber-cushioned steel channels. **Note:** Discharge adapter can be supplied for use with 2½-in. hose.

Chief R. M. Wilson of Monroe City, Missouri, suggests that all Fire Trucks should have a Hale type FZZ portable pumping unit . . . He writes: I want to tell you how pleased I am with this FZZ pump. We received it May 27th. On May 29th I was compelled to use it during a bad rain storm as our large pumper was unable to reach water supply. We put the little pump at a pond, used 500 ft. 1½" hose layout, and saved this farmer almost $2,000.00 **The FZZ gave a nice fire stream. The motor started on the first pull in a downpour of rain. Not one time did it stop. We used it for almost 2 hrs. Had we not had this portable pump, there was no way we could put out this fire. I think all fire trucks for Town or Country should have one or more."**



Above — FZZ Pumping Foam. (Foam proportioner built in if specified.)

With a ready-for-use Hale FZZ you can fight fires not only with solid stream and/or fog, but also with foam.

The easily portable FZZ can be mounted in any apparatus, making it possible to fight fires while apparatus is in motion, using booster tank for source of water. It will supply from draft 2 capable fire streams thru 1½" lines. Performance substantially exceeds NBFU and NFPA requirements for portable pumping units.

Write today for FZZ circular. Ask for demonstration.

HALE FIRE PUMP CO.

CONSHOHOCKEN, PA.

Fire Pumps in All Standard Capacities

New Orleans Nursing Home Fire

(*Continued from page 17*)

and personally carried out two of the bedridden patients, one of whom died later in the hospital. Fourteen other patients were rescued; 12 of them carried out bodily, and 2 on stretchers. Of the 21 patients, 5 were bedridden, and 4 of these died from the fire. Two bodies were found on the springs of beds which had sagged to the floor; two others were beside their beds and one was in the lavatory room adjacent to his bedroom.

The building had been in existence for a number of years and apparently had been constructed without plans, specifications or permit. The Fire Prevention Division had inspected the property and in July had issued the following orders for corrections.

Immediately discontinue using the building (*LeLe Nursing Home — Ed.*) for the housing of old folks or other institutional purposes or

1. Remove all combustible refuse and rubbish from building, space beneath building and yard area.
2. Remove grease from fans and surrounding area.
3. Discontinue obstructing any exit opening with furniture or any other material and/or objects.
4. Replace broken glass on exit fixtures.
5. Replace all burned out globes in exit fixtures.
6. Discontinue the use of improvised wiring in garage area.
7. Discontinue overfusing electric circuits.
8. Discontinue connecting extension cords into ceiling fixtures.
9. Place entire electrical installation in conformity with City Electrical Code. All work to be done by licensed electrician under permit.
10. Provide an approved sprinkler system.
11. Provide approved fire extinguisher in kitchen area.
12. Remove bed and other furniture from close proximity of bathroom heater.
13. Remove water heater from room used for sleeping purposes.
14. Place defective rear steps in a safe state of repairs.
15. Place flooring and floor joists in a safe state of repairs.
16. Discontinue the use of fabric as room separation.

Fire department members who made a reinspection of the building found that all of these recommendations had been complied with, with the exception of the completed sprinkler system.

Booklet on Nursing Home Fires

A 16-page illustrated booklet entitled "Let's Prevent Nursing Home Casualties" has been reprinted from an article which appeared in the October 1954 NFPA *Quarterly*. Prepared by Chester I. Babcock, Manager, NFPA Fire Record Department, the booklet describes fire incidents, building principles, contents and occupants features, and fire protection features of nursing homes and similar institutions which require studied attention and constructive action if fire safety is to be assured.

Copies of the paper-bound booklet may be obtained for 35 cents each from the NFPA Publications Department, 60 Batterymarch Street, Boston 10, Massachusetts.

Exterior of LeLe Nursing Home showing wing where most of the patients were housed. Fire started in area at left where remains of roof are sagging.

Rockwood Nozzle SG-60 is of lightweight, durable, aluminum alloy with high-polished finish. Chrome plated bronze ball valve with synthetic rubber seat. All gaskets are synthetic rubber, all other parts are bronze, brass or stainless steel.

One nozzle fights fire 5 ways

This is the WaterFOG nozzle you can use to fight fire in 5 different ways.

It's Rockwood's "ALL-PURPOSE" SG-60 that makes unnecessary most special purpose nozzles. It discharges fire quenching High Velocity WaterFOG, Low Velocity WaterFOG (with applicator), FogFOAM or a solid stream of water or FOAM.

This Nozzle is designed to put out Class A, B or C fires faster, safer and more economically. A quick shift of the handle instantly provides the right type of discharge for any type of firefighting job.

Put this efficient, versatile Rockwood SG-60 Nozzle to work for you.

ROCKWOOD

ROCKWOOD SPRINKLER COMPANY

Engineers Water . . . to Cut Fire Losses

High Velocity WaterFOG's solid cone pattern gives firefighter adequate protection from heat while quickly quenching blaze.

Low Velocity WaterFOG discharged with special attachment spreads umbrella pattern, smothering fire without causing turbulence to flammables.

FF extension discharging FogFOAM. Wide angle makes it possible to cover large areas at one time.

Shift to long range straight stream of water or FOAM can be made quickly and positively when required.

SEND FOR THIS INFORMATIVE BOOKLET

ROCKWOOD SPRINKLER COMPANY
Portable Fire Protection Division
282 Harlow Street
Worcester 5, Mass.

Please send me your illustrated booklet No. 3-20-8 on type SG-60 WaterFOG Nozzle and other Rockwood firefighting equipment.

Name_____
Title_____
Company_____
Street_____
City_____ Zone____ State_____

POWHATAN

One Quarter Turn Siamese

Best your money can buy!

PLATE No. 175

This is but one item in our vast line of precision tooled, strongly built, brass fire-fighting equipment. Since 1892 our single aim has been — improvement of our products — and repeat orders from Fire Departments all over the United States have proven the value of such a policy.

POWHATAN BRASS and IRON WORKS
RANSON, WEST VIRGINIA
Phones 93 & 94 Charles Town, West Virginia
Established 1892

MIDWESTERN
Safety Clothing for FIREMEN
The Original STRIPED SAFETY COAT

The striped safety coat for firemen is an *original* MIDWESTERN development . . . featuring highly visible yellow stripes which are *rubberized as part of the material* . . . not painted, glued or sewed on!

Service records prove that Midwestern Striped Safety Coats withstand years of rugged duty . . . offer high safety visibility during the entire life of the garment. There are many imitations but *no substitute* for the workmanship, built-in comfort and longer wear you receive by specifying MIDWESTERN.

MIDWESTERN LEADS IN QUALITY

Superior quality, advanced design, exclusive fabric materials and safety features have made Midwestern a leader in the field of firemen's safety clothing. For complete information on our full line, see your Midwestern dealer. A letter to the factory will also bring you literature and material samples for your inspection.

MIDWESTERN SAFETY MFG. CO. Mackinaw, Illinois
Manufacturers of the Famous **MACKINAW Safety Coats**

Fire Prevention Week Contest

(*Continued from page 12*)

Perhaps the best evaluation of Puerto Rico activities lies in its fire loss report. During the 1952–53 period fire loss was reported as $1,720,046, while the fire loss for 1953–54 period dropped to $814,302. By cutting this monetary fire loss in half Puerto Rico achieved a 15 percent reduction in fire insurance costs.

Summing Up

The last means of evaluating an entry lie in the results obtained through the Fire Prevention Week program and how these results are consolidated into the year-round program. The average number of fires per week for a full calendar year also has important meaning.

Judges of the entries give point credits to each of the sections and the total number of points decides who wins in a particular class. For municipalities, classification is determined by the population size.

Through the years a general point total has been devised in which a perfect entry could score a possible 100 points. On this basis judges consider "Inspections" worth a possible 20 points; "Youth and School Activities" a possible 25 points; "Commerce, Industry and Civic Cooperation a possible 20 points; "Publicity" a possible 20 points; and "Results" a possible 15 points. These are the maximum totals that can be obtained for any of the entry blanks sections, and the consensus of the judges' totals brings a point total which provides a fair, impartial evaluation of each entry.

Members of the International Board of Judges for the 1954 Fire Prevention Week Contest were: T. Seddon Duke, president, NFPA, and president, Star Sprinkler Corp., Philadelphia; Clarke Smith, general manager, United States branch of the Royal Liverpool Insurance Group, and chairman, National Board of Fire Underwriters' Committee on Fire Prevention and Engineering Standards, New York; George P. Ludlum, vice president, The Advertising Council, Inc., New York; A. Leslie Ham, manager, Dominion Board of Insurance Underwriters, Montreal; and John D. Gerletti, general manager, International Association of Fire Chiefs, New York.

WILMINGTON WAREHOUSING CO.
protects its property *Automatically*....
gets better FIRE and BURGLARY PROTECTION and

SAVES $3,150 A YEAR

American District Telegraph Company:

At 6:01 p.m., March 10, 1954, a fire started in our men's locker room and was immediately reported automatically to the fire department. Though our sprinkler system had the fire practically under control when the engines arrived, your waterflow alarm service notified the fire department in time to prevent excessive water damage.

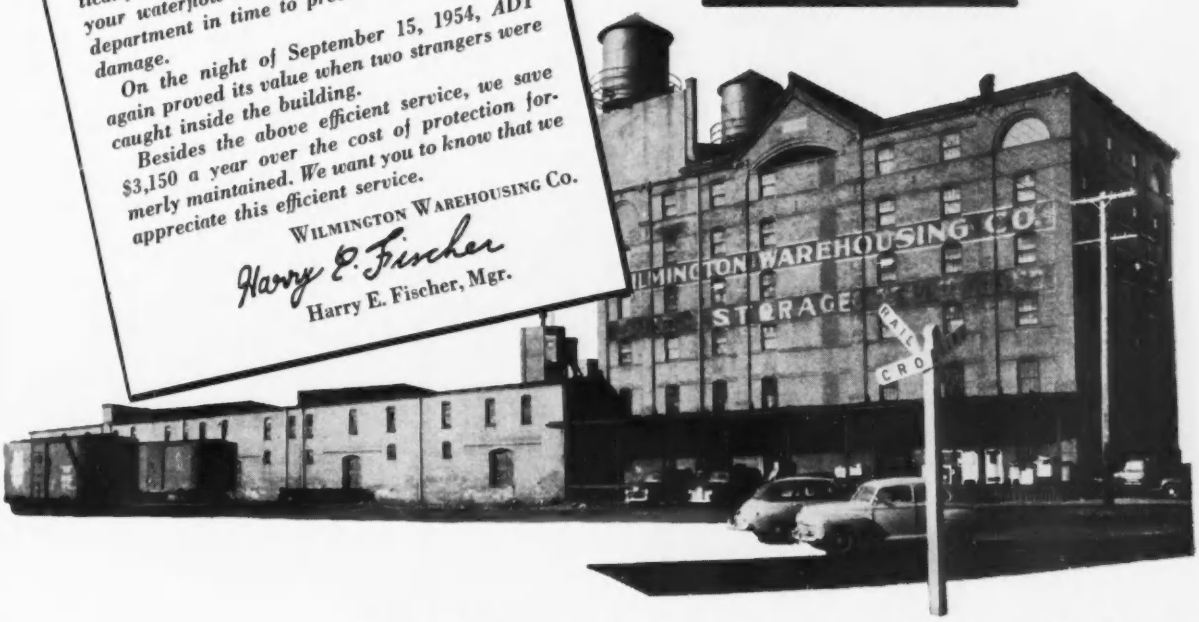
On the night of September 15, 1954, ADT again proved its value when two strangers were caught inside the building.

Besides the above efficient service, we save $3,150 a year over the cost of protection formerly maintained. We want you to know that we appreciate this efficient service.

WILMINGTON WAREHOUSING CO.

Harry E. Fischer

Harry E. Fischer, Mgr.



Twice within six months, officials of the Wilmington Warehousing Co. experienced, first-hand, the all-round effectiveness of ADT Automatic Protection Services.

The warehouse is protected by a combination of ADT Central Station Sprinkler Supervisory and Waterflow Alarm and ADT Burglar Alarm Services. Manager Harry E. Fischer's endorsement is typical of the satisfaction expressed by thousands of business executives from coast to coast who are obtaining better protection at lower cost through complete ADT *Automatic* Protection.

Whether your premises are new or old, sprinklered or unsprinklered, the appropriate ADT Fire Alarm Service will detect fire and notify the fire department *automatically*. ADT Burglar Alarm Service will *automatically* summon police when burglars attack. ADT Heating and Industrial Process Supervision will *automatically* detect and report other abnormal conditions.

ADT safeguards, electrically, many billions of dollars' worth of tangible and intangible assets owned by 57,000 subscribers in more than 1,600 municipalities. An ADT specialist will be glad to show you how combinations of automatic services can protect *your* property, profits and employees' jobs by minimizing fire and burglary losses.

Call our local sales office if we are listed in your phone book; or write to our Executive Offices.

ADT

Controlled Companies of
AMERICAN DISTRICT TELEGRAPH COMPANY
A NATIONWIDE ORGANIZATION
Executive Offices
155 Sixth Avenue, New York 13, N. Y.

CAIRNS

PERSONAL

EQUIPMENT

FOR

FIREMEN

Avail yourself of the many advantages of buying ALL your personal equipment, from head to foot, from one dependable source—from a firm that assumes responsibility for the quality of EVERY item, and that stands back of it with a reputation gained in serving firemen for more than a hundred years. . . . Here is a partial list of the equipment we can supply, promptly. Many other items are described in our Catalog, sent on request.

TURNOUT SUITS RUBBER COATS RUBBER BOOTS

RUBBER-LINED MITTENS ASBESTOS GLOVES

SAFETY BELTS TRAFFIC OFFICERS' BELTS, CAPS, BADGES

HELMETS

LEATHER
ALUMINUM
FLINT-FLEX

REGULATION
and
OTHER STYLES

• • • • •

FOR THE DEPARTMENT,

SECRETARY'S RECORD BOOKS

LOOSE-LEAF FIRE RECORD BOOKS

SECRETARY'S BLANK FORMS

Write for Catalog 340

CAIRNS & BRO., Inc. - Allwood, Clifton, N. J.

SINCE 1836

Membership Report

THE Sharon, Wisconsin, Volunteer Fire Department, headed by Chief Charles J. Morris, Jr., takes full advantage of its membership in NFPA. The department has been a member of the Association for the past ten years and at present has 29 active fire fighters. During this period every member has had a subscription to FIREMEN magazine and Chief Morris has just renewed his membership and the subscriptions for all of his men.

Many fire departments are now following this policy. Usually a department which joins NFPA for the first time takes only the six subscriptions of the FIREMEN which are included with the membership of municipal fire departments. Later, though, in renewing, such departments generally increase their demands and secure the extra subscriptions for $1.25 each. There are exceptions such as the Seville Fire Department of Ohio (see below) which subscribes to 22 issues of the magazine each month.

If your fire department is to renew its membership soon, why not ask all of your fire fighters if they would like to subscribe to FIREMEN for only $1.25 per year? Just add the new names onto the renewal blank and indicate the proper mailing addresses if they want the magazine sent to their homes.

NFPA Welcomes:

NFPA Welcomes: The following fire chiefs and fire departments who have joined the Association. Current NFPA Fire Department membership totals 2,125 fire departments and 25,356 men.

California: Chief Raymond W. Bell, Winterhaven Fire Department, Winterhaven.

Connecticut: Windsor Locks Fire Department, Windsor Locks.

Maine: Chief Byron Frisbee, Kittery Point Fire Department, Kittery Point.

Minnesota: South St. Paul Fire Department, South St. Paul.

Montana: Conrad Volunteer Fire Department, Conrad.

New York: First Volunteer Fire Company of Bergholz, Inc., Niagara Falls.

Nova Scotia: Chief E. C. MacKinnon, Sydney River Volunteer Fire Department, Sydney River.

Ohio: Seville Fire Department, Seville.

27 years young
AND STILL RARIN' TO GO

Delivered in 1928 to the town of Livingston, N. J., this Model AK Mack 750 gpm triple combination pumper was among the first fire apparatus to boast four wheel brakes and pneumatic tires. She still rolls on the toughest jobs.

There's a world of difference between this 1928 Mack pumper and her modern successor pictured below. But there's one thing both have in common. It's Mack Bulldog tenacity—the refusal to quit under even the toughest going.

By all rights, "Snow White"—as the elder Mack has been called since the days when she sported a coat of that color—should be ready to hang up her hard suctions and turn out to pasture. But instead, she's being transferred to another section of Livingston to help protect that community's fast-growing outskirts.

No secret why thousands of communities of all sizes have come to expect the best from Macks. Nearly fifty years of service have proved that there's no compromise with quality in Macks . . . because to Mack, only the best is good enough for the fire services.

Most recent Mack to be put in service by Livingston is this new Model B-85, 750 gpm triple combination pumper with coupe cab, built-in side lockers, and wet water proportioner.

MACK MANUFACTURING CORPORATION
Empire State Bldg., New York 1, N. Y.

2955

TRIPLE COMBINATION PUMPERS—500 TO 1250 GPM . . . SQUAD AND HOSE CARS . . . 65, 75 AND 85 FOOT AERIALS AND COMBINATION LADDER TRUCKS

Questions for

Assistant or Deputy Chief of Fire Force

IT HAS been stated by outstanding authorities on fire department administration that in examinations for high ranking chief officers, fire problems are of secondary importance, but knowledge of administration, organization, and ability to make valid decisions are paramount. One chief put it this way: "Some of our district chiefs were surprised that the 'deputy chief' and 'assistant chief examinations' included no fire questions, but we expect them to know fire fighting by the time they are chief officers. What we want to find out is what they know about organization and the management of men."

Therefore, while we would not be surprised at finding a fire question or two in an examination for Assistant Chief of Fire Force, we suggest some other types of questions that also might be expected to predominate. In conformity with the high level of this exam, these are questions requiring exercise of judgment rather than a simple true-false or ABC type of answer.

1. Name five changes or improvements that you believe should be made in the rules and regulations of the Fire Department, giving your reasons for the recommended changes.

2. Assume that in a certain section of the department there has been an abnormal amount of sick and injury leave which is difficult to justify and which is keeping fire companies undermanned. State what steps you would take toward solving this problem.

3. You are directed to prepare a report form for use on all working fires handled by the department in order that their lessons may be studied. Outline the type of information you would seek in such a report form.

4. What procedure would you recommend to permit men to voluntarily exchange duty tours in a fair and yet business-like-manner.

5. How many men will be required to provide seven men on duty with a fire company working a 48-hour week and averaging 21 days annual leave and 10 days sick and injury leave? Show in detail how you arrive at your answer.

6. Newspaper accounts report radiation injury and fatality to Japanese fishermen some 78 miles distant from the tests explosion of a hydrogen bomb. Discuss the implications of this fact from the viewpoint of your department's Civil Defense preparations.

7. Fire occurs in an electric truck in a tunnel construction project some 400 feet below the surface and one-quarter mile from the shaft. Workmen's lives are endangered. Tell of the extinguishing agents that you would employ, special equipment that you would call and use, limitations and precautions to be considered.

8. In planning a mutual aid program would you have outside companies mainly respond directly to the fire or cover vacated stations? Give your reasons.

9. You respond to a 3rd alarm for a fire in the top floor of an old brick-joisted apartment building 80 x 200 ft. area. Three pumpers are already connected to hydrants on a 6-in. main near the building but have poor streams because less than 700 gpm is available in this main. Two additional hydrants are available on a 12-in. main 800 to 1,000 ft. from the fire. Three aerial ladders have responded. Tell what you would do to control this fire. The only near exposures are plain glass windows across a 15-foot alley.

10. A 30-in. arterial feeder supplying water mains for a large area of the city has broken. The nearest emergency supply is an 8-in. main 3600 ft. distant with 35 psi static and 1200 gpm available. Tell of the steps you would take to provide water and fire protection in the stricken area for 36 hours while the main is being repaired.

11. Explain briefly the meaning of fusion and fission as applied to atomic energy and give the chief chemical elements involved in making each principal type of "atomic bomb."

12. State whether you would prefer to have two engine companies with six men each or three engine companies with four men each. State all the reasons for your position.

13. Suggest various practical plans to man reserve fire apparatus during times of emergency, such as major fires, natural disasters, and holiday celebrations.

14. You receive a report that in the absence of the assigned company officer an altercation has taken place in a fire house. State the procedure that you would follow under the rules of the department to investigate and take appropriate action in this situation.

15. If you received a report that a 1½-in. fog nozzle failed to control a routine Class A fire, state what facts you would look for in order to fairly evaluate the experience and take corrective action.

(For a series of questions concerning the duties of a Chief of the Fire Prevention Bureau, refer to the December, 1954, issue of FIREMEN. *Another set of questions concerning the duties of a Chief of Staff Division was in the January, 1955, issue. At a later date, if interest warrants, implications of the particular questions may be discussed in detail* — Ed.)

Monroe FOLDING BANQUET TABLES
Direct Prices and Discounts to Fire Halls, Lodges, Churches, Schools, Societies, Clubs and All Organizations
MONROE TRUCKS
Transport and Transport - Storage Trucks for Folding Tables and Chairs.
WRITE FOR CATALOG
THE Monroe COMPANY
277 CHURCH STREET • • • • COLFAX, IOWA

NOW THE FIRST "Packaged" FIRE ALARM SYSTEM

PREVIOUS EQUIPMENT REQUIRED THIS MUCH SPACE

NEW GAMEWELL FORM 4
USES ABOUT THIS MUCH SPACE

For the small community, or for decentralized big city Fire Alarm Systems, The Gamewell Form 4 fills today's needs.

THE GAMEWELL FORM 4

In 20% to 30% of the space previously used, you can install this complete control unit, including batteries.

And the Gamewell Form 4 Automatic Control System enables you to put saved dollars into street fire alarm boxes for public safety and reduced fire losses.

This "packaged" Fire Alarm Control Cabinet is quickly and easily installed. It contains *all* the devices needed for a complete central office setup. It *automatically* repeats box alarms and warns if a circuit is broken. It has a reserve power supply for emergencies and meets NFPA-NBFU Standards.

FEATURES

- **Requires only 20% to 30% of space previously needed for complete central office equipment including batteries.**
- **Quickly and easily installed.**
- **Reserve power for emergencies.**
- **Available in any capacity required to 10 circuits. Readily expanded to meet growing needs.**
- **Automatically repeats box alarms; warns if a circuit is broken.**

Bulletin 3A gives a complete description of the Gamewell Form 4 Control Cabinet. Write for a copy today. No obligation.

THE GAMEWELL COMPANY
NEWTON UPPER FALLS 64, MASS.

GAMEWELL

THE BOX IS POSITIVE
Reduces Human Error

New "Sparky" Book

A colorfully illustrated 28-page hard cover book for children is a new addition to the "Sparky" campaign. Published by Rand McNally & Company, Chicago, Illinois, in cooperation with the home fire prevention campaign sponsored by NFPA and the Advertising Council, "Sparky The Fire Dog" (left) is one of the "Book-Elf" series. Copies priced at 25 cents each are now available in department stores and other sales points for children's literature.

Going to a Fire School?

Indiana: The 11th Annual Seminar in Arson Detection and Investigation will be held at the Memorial Union Building of Purdue University, April 25–29. For further information write to Professor Shelby Gallien, Public Safety Institute, Purdue University, Lafayette, Indiana.

Maryland: The 4th Annual Fire Inspectors Short Course will be held at the University of Maryland, April 5–8. The NFPA Inspection Manual will be used as a text. Meetings will be held in the Fire Service Extension Building on the campus. Write to Robert C. Byrus, Director, Fire Service Extension, University of Maryland, College Park, Maryland.

Minnesota: The 1955 Minnesota Fire School will be held at the University of Minnesota's Institute of Agriculture, St. Paul, April 25–29. For further information write to Dr. J. O. Christianson at the Institute, or to Leonard C. Lund, Deputy Commissioner, Fire Marshal Department, St. Paul, Minnesota.

"Fire Chief"
Flame-Proof
Fire-Fighting
BROOM
$3.50 each
$40 per dozen
FIBRES COLORED FIRE DEPT. RED
Specifications:
60" overall length (assembled)
30" in shipping container
Strong hickory handles
Patent Pending
30"
Shipped in Flat Cartons . . . Easy to Store
Chemically flame-proofed. Approved N.Y.C. Board of Standards and Appeals. Heavy gauge rust-proof metal head and collars. Meets U.S. Forestry and City Fire Dept. specifications.
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For further information contact:
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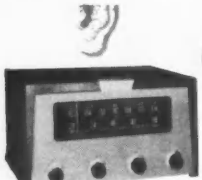
GO MODERN WITH THIS NEW, REVOLUTIONARY
A & W POCKET COMPUTOR
THE A&W POCKET COMPUTOR
FAST! ACCURATE! AUTOMATIC!
STOPS GAUGE DAMAGE
STOPS PUMP DAMAGE
SAVES TIME & MONEY
PREVENTS INJURIES
PREVENTS RUPTURED HOSE
If you gamble with hose pressure you might as well organize a bucket brigade! Don't risk it! The A&W Pocket Computor completely calculates all 1½" and 2½" single, double, equal and unequal double lays, Y's and Siamese lays up to 1500'. Exactly locates every pumper in relays up to 7000' and indicates their pressures. Constant charts for 1½" or 2½" lays, master lines, fog and special nozzles, foam formulas, conversion factors, cautions plus other useful pumping information. Weather-proof vinyl plastic.
See your dealer or order direct by sending name and address with amount to cover cost. 1: $3.00. 2-11: $2.50 ea. 12 or more: $2.25 ea.
A & W SPECIALTY CO.
3717 MIDLAND AVE. SYRACUSE 7, N. Y.

State Charter for Chiefs Association

The Fire Chiefs Association of Boston, Incorporated, recently received its Massachusetts corporate charter. Shown at the presentation ceremony are: (*Left to right*): District Chief Edward J. Galvin; District Chief Charles D. Travis; Massachusetts Secretary of State Edward J. Cronin; District Chief J. Herbert White; and Assistant Chief Patrick E. Collins.

Appointments in Buffalo, New York

The Buffalo, New York, Fire Department recently reorganized for better administration and fire fighting operations. Changes included the appointments of six new Division Chiefs. Seated and examining reorganization recommendations in the picture above are: Buffalo's Commissioner of Fire Charles A. Halloran; Buffalo's Mayor Steven Pankow; and Warren Y. Kimball, Manager, NFPA Fire Services Department. New division chiefs standing at rear include (*left to right*): John J. Crotty; Anthony Healy; Joseph M. Flick; William J. Boland; Raymond F. Schnorr; and Leo J. Sullivan.


got ears?
BE ON THE CONSTANT ALERT
All Departments Can Now Listen to Every Vital Message
MONITORADIO for a thoroughly coordinated 2-way communication system.
Now every member of every department can have radio communication for as little as $49.95
Write today for further information.
- Nation's most complete line of monitor receivers.
- Crystal controlled or tunable for any VHF FM communication system.
- Mobile or stationary receivers.
- Prices to meet any budget.
- Certified for civil defense use.

MONITORADIO RADIO APPARATUS CORPORATION
7900 Pendleton Pike, Indianapolis, Ind. Phone: CHerry 2466

FROST-PROOF DESIGN

of Barton-American Type UA Front Mounted Fire Pump gives extra safety factor for winter operation

You *never* have to worry about your Barton-American Type UA Pump freezing! For this unique, effective *frost-proof design* gives you positive operation even in the coldest weather!

Water at engine temperature constantly circulates from engine cooling system through the cored suction head of the UA Pump. Even at sub-zero temperatures, this always keeps the pump well above the freezing point.

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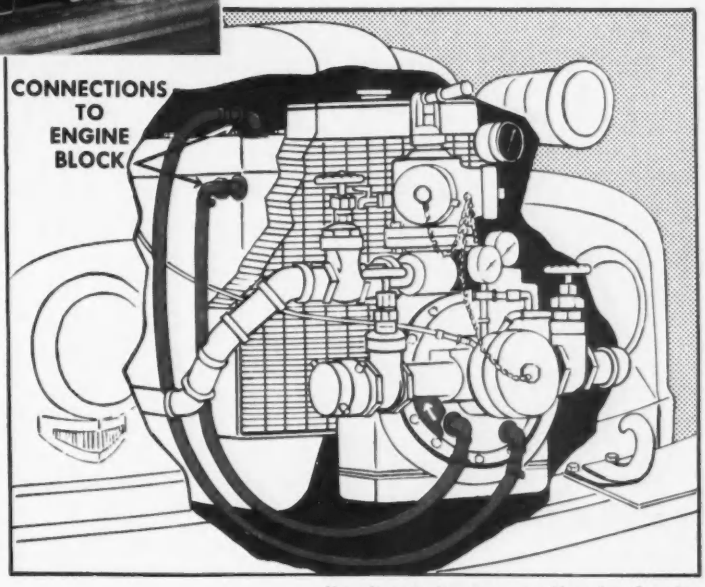

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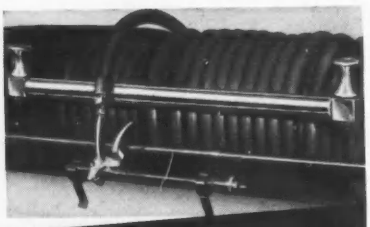

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MAKING A GOOD JOB OF IT

BY WARREN Y. KIMBALL

Pump Pressures for 1½-in Fog Lines

NORMALLY, best results in supplying 1½-in. fog lines will be obtained when the pumper is within 200–250 ft. of the nozzles. Where hydrant pressures are not sufficient to provide 200 gpm or more to a pumper several hundred feet away, the pump must be directly connected to the hydrant or a two-pump relay may be employed.

Figure 1 shows a layout supplying two 100 gpm fog nozzles on 1½-in. hose at 100 lbs. nozzle pressure. The actual layout may be made with a fire to hydrant lay by the pumper, or by a separate hose wagon as shown in the diagram. Friction loss tables for 1½-in. hose show 33 lbs. loss per 100 ft. with 100 gpm flowing. Actually, these figures are high and the round number of 30 lbs. per 100 ft. may be used, giving 60 lbs. for 200-ft. leader lines and 75 lbs. for 250-ft. lines. Additional pressure will be needed at the pump to overcome the loss in the 2½-in. supply line, which, when carrying a total of 200 gpm for two 1½-in. leader lines, will be 10 lbs. per 100 ft. If three 1½-in. lines are supplied at 100 gpm each, the 300 gpm flow would call for 20 lbs. FL in the 2½-in. supply hose.

No additional pressure is shown for elevation because for average two and three story buildings the difference is not worth bothering with. If a nozzle is going to be moved higher than 25 ft., an additional 10 lbs. pump pressure may be added.

Figure 2 shows a similar layout with two 1½-in. fog nozzles discharging only 75 gpm at the same nozzle pressure. This results in lower friction loss in both the 1½-in. leader lines and the 2½-in. supply line. Since many adjustable fog nozzles give varying flows with different stream patterns, these two situations may be encountered with the same layout and nozzles. As nozzles are adjusted the pump gages will fluctuate. Actually, with 1½-in. leader lines a good practice is to provide pressure needed for the maximum flow of the nozzles employed because even if the NP runs up to 125 lbs. or more this is still a desirable operating pressure for 1½-in. leader lines.

Where 1½-in. fog nozzles are employed that give only about 50 gpm each, the FL in the 1½-in. hose will be less than 10 lbs. per 100 ft. and the FL per 100 ft. of 2½-in. hose will be only 5 or 6 lbs. with two leader lines operating.

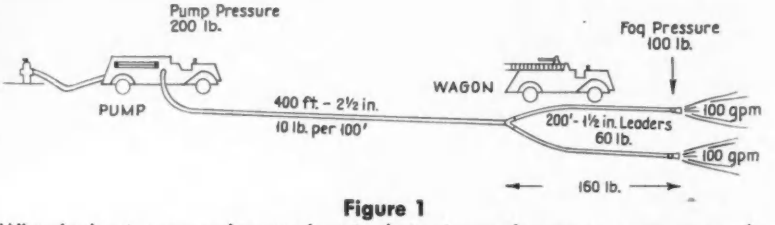

Figure 1

When hydrants can supply enough water but not enough pressure, pumper may be spotted close to the hydrant to move water at required pressure through lengthy 2½-in. supply line as in this diagram.

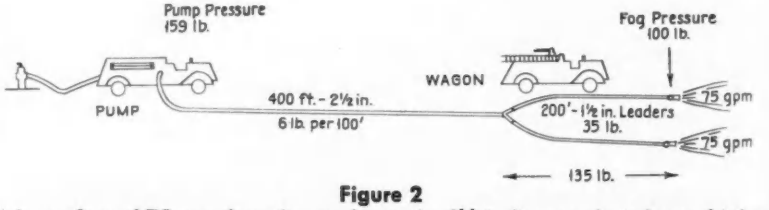

Figure 2

A lesser flow of 75 gpm from the nozzles on the 1½-in. lines results in lower friction loss in both the leader and supply lines. Thus friction loss in the leader lines drops to 35 lbs. and in the 2½-in. supply lines it is only about 6 lbs. per 100 ft.

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Mine Safety Appliances Company's complete line of combustible gas analyzers and alarms are described in a 20-page brochure now available from the Pittsburgh, Pennsylvania, safety equipment manufacturer. Ask for Brochure No. 0703–3 from *Mine Safety Appliances Company*, 201 North Braddock Ave., Pittsburgh 8, Pennsylvania. . . .Are industrial plants in your city receiving Protectoseal safety bulletins? These monthly 4-page illustrated bulletins show how fire safety can be assured through the use of safety equipment carrying the Factory Mutual Fire Insurance and Underwriters' Laboratories, Inc., approval. Your industrial plants can have this practical information regularly by writing to Mr. A. M. Stevens, President, *The Protectoseal Company*, 192 South Western Ave., Chicago 8, Illinois. . . . From the new enlarged plant of Guy Barnette & Company, Inc., comes the announcement that their 1955 line of special ambulances and coaches carry the latest features in styling and design. Ask for descriptive literature from *Guy Barnette & Company, Inc.*, Dudley and Eastmoreland, Memphis, Tennessee. . . . Motorola announces greater R.F. selectivity and increased reliability for their improved mobile radio receiver now in production. More information about the new 450 mc receiver and transmitter is available from *Motorola Communications and Electronics, Inc.*, Technical Information Center, 4501 West Augusta Boulevard, Chicago 51, Illinois.

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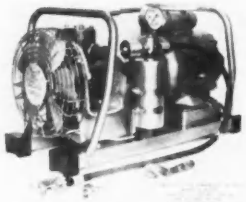

Portable Air Compressor

New lightweight portable high pressure air compressors are being produced by The Cornelius Company, 550 39th Avenue N.E., Minneapolis 21, Minnesota. There are four models designed to supply air to Scott Air-Pak and MSA Respiratory Equipment. Compressors are available with electric motors and gasoline power source.

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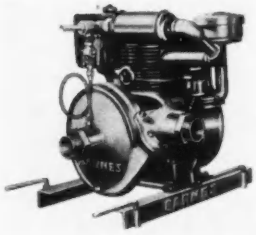

New Portable Pump

A new lightweight portable pumper is being produced by Barnes Manufacturing Company, Mansfield, Ohio. Powered by an 8½-hp Briggs and Stratton single cylinder air-cooled engine, the pump has a capacity of 100 gpm at 60 pounds and 50 gpm at 90 pounds, when pumping water through 140-ft. and 208-ft. lines respectively. It has 2½-in. suction and discharge connections. Body of the pump is cast aluminum and measures 23 inches in length, width and height. Swing handles lock into position for carrying. Weight of the pump is 170 pounds normally, but addition of pneumatic tires raises weight to 210 pounds. Write to the manufacturer at the above address for further information and illustrated literature.

Hydrant Jet Drain

A new model of the "One-Minute" hydrant jet drain recently taken over from the Jet Drain Engineering Company, Saginaw, Michigan, by Ellis and Ford Manufacturing Company, Inc., Ferndale 20, Michigan, has been placed on the market by the latter company. By means of a 6-volt motor and air compressor connected to the battery of the truck, water is completely expelled from a hydrant in one minute's time, says the manufacturer. For illustrated literature write to Ellis & Ford Mfg. Company, 2423 Goodrich Avenue, Ferndale, Michigan.

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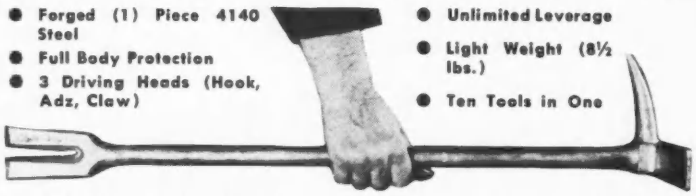

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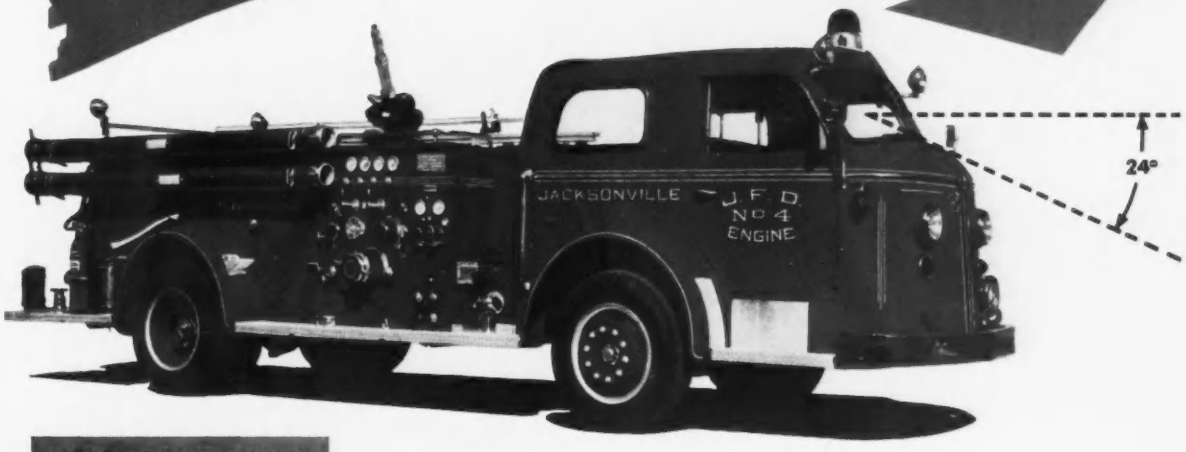

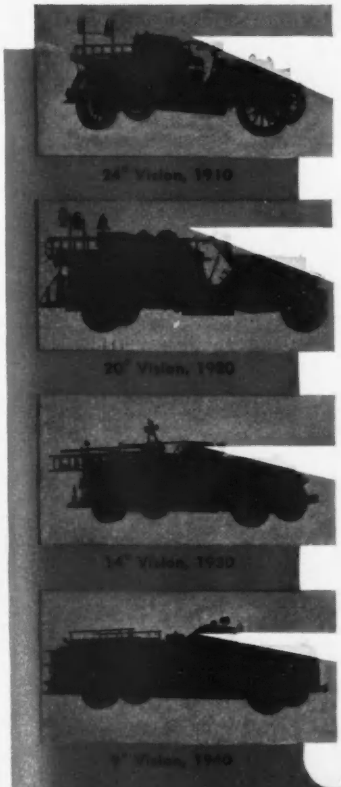

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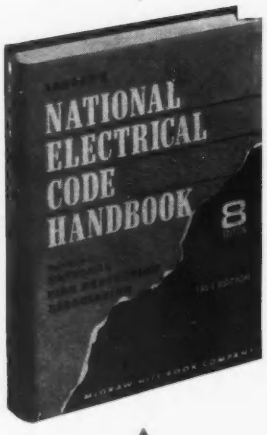

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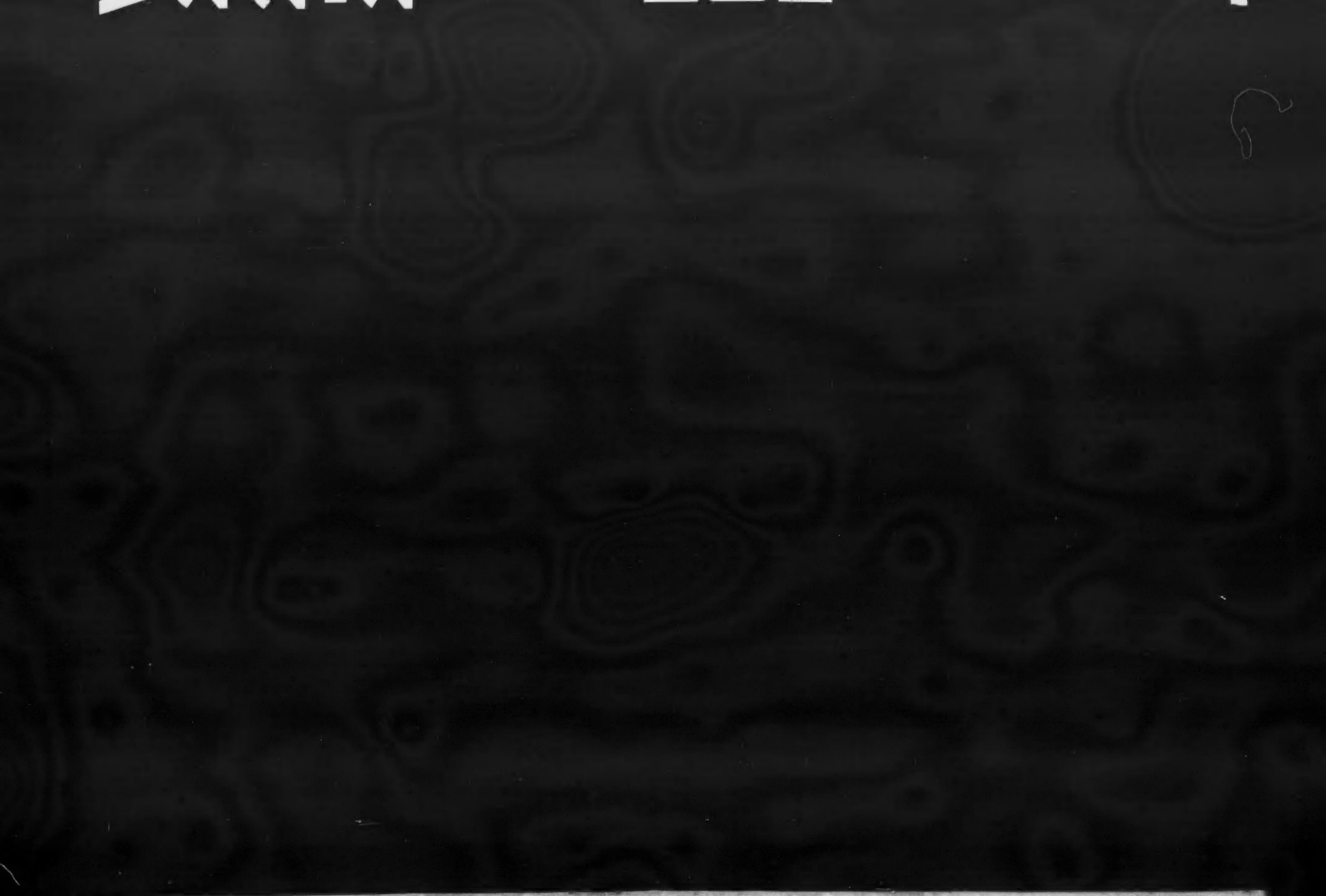
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